WEST Search History

Hide Items | Restore | Clear | Cancel

DATE: Friday, April 23, 2004

Hide?	Set Name	Query	Hit Count
		DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI; PLUR=YES; OP=ADJ	
☐	L18	L17 NOT Rosen-Craig-A.IN.	57
☐	L17	L16 NOT Desnoyers-Luc.IN.	62
☐	L16	L15 AND 435/325.CCLS.	145
☐	L15	L14 AND progenitor	356
☐	L14	L13 AND oligodendrocyte	426
☐	L13	L12 AND neurons	825
☐	L12	L11 AND bFGF	890
☐	L11	(astrocyte)	4180
☐	L10	L4 AND L9	56
☐	L9	transdifferentiation	156
☐	L8	transdifferenation	0
☐	L7	L6 AND human neural progenitor cell	9
☐	L6	L5 AND astrocyte	535
☐	L5	L4 AND bFGF	1538
☐	L4	435/325,352,353,354,363,366,368,377.CCLS.	16387
☐	L3	Salin-Nordstrom-T.IN.	0
☐	L2	Salin-Nordstrom-Tuija.IN.	0
☐	L1	(Salin-Nordstrom.IN.)	1

END OF SEARCH HISTORY

h e b b cg b chh e f f e ch e c ch

NCBI PubMed National Library of Medicine NLM

Entrez PubMed Nucleotide Protein Genome Structure OMIM PMC Journals Book

Search PubMed for astrocyte AND bFGF Go Clear

Limits Preview/Index History Clipboard Details

About Entrez

Display Summary Show: 500 Sort Send to Text

Items 1-373 of 373 One page.

Text Version

Entrez PubMed
Overview
Help | FAQ
Tutorial
New/Noteworthy
E-Utilities

PubMed Services
Journals Database
MeSH Database
Single Citation Matcher
Batch Citation Matcher
Clinical Queries
LinkOut
Cubby

Related Resources
Order Documents
NLM Gateway
TOXNET
Consumer Health
Clinical Alerts
ClinicalTrials.gov
PubMed Central

Privacy Policy

1: Avola R, Mignini F, Mazzone V, Fisichella A, Zaccheo D, Tomassoni D. Related Articles, Links

Growth factor-estradiol interaction on DNA labeling and cytoskeletal protein expression in cultured rat astrocytes.
Neurosci Lett. 2004 Apr 1;358(3):177-80.
PMID: 15039110 [PubMed - in process]

2: Kim BJ, Kim SS, Kim YI, Paek SH, Lee YD, Suh-Kim H. Related Articles, Links

Forskolin promotes astroglial differentiation of human central neurocytoma cells.
Exp Mol Med. 2004 Feb 29;36(1):52-6.
PMID: 15031671 [PubMed - in process]

3: Li G, Ke Y, Jiang X, Xu R, Zhou Y, Wang W, Cheng W, Liao K. Related Articles, Links

[A pilot study on the culture and differentiation of bone marrow stromal cells from SD rats]
Sheng Wu Yi Xue Gong Cheng Xue Za Zhi. 2004 Feb;21(1):16-20. Chinese.
PMID: 15022454 [PubMed - in process]

4: Liu FL, Fuxe K, Belluardo N, Leo G, Agnati LF, Aguirre JA. Related Articles, Links

Acute intermittent nicotine treatment produces a reduction in the total number of FGF-2 immunoreactive astroglial cells in the substantia nigra of the rat: a stereological analysis.
Neurosci Lett. 2004 Jan 30;355(3):181-4.
PMID: 14732461 [PubMed - indexed for MEDLINE]

5: Zhang H, Wang JZ, Sun HY, Zhang JN, Yang SY. Related Articles, Links

The effects of GM1 and bFGF synergistically inducing adult rat bone marrow stromal cells to form neural progenitor cells and their differentiation.
Chin J Traumatol. 2004 Feb;7(1):3-6.
PMID: 14728810 [PubMed - indexed for MEDLINE]

6: Negishi T, Ishii Y, Kyuwa S, Kuroda Y, Yoshikawa Y. Related Articles, Links

Primary culture of cortical neurons, type-1 astrocytes, and microglial cells from cynomolgus monkey (Macaca fascicularis) fetuses.
J Neurosci Methods. 2003 Dec 30;131(1-2):133-40.
PMID: 14659833 [PubMed - indexed for MEDLINE]

7: Gabay L, Lowell S, Rubin LL, Anderson DJ. Related Articles, Links

Deregulation of dorsoventral patterning by FGF confers trilineage differentiation capacity on CNS stem cells in vitro.
Neuron. 2003 Oct 30;40(3):485-99.
PMID: 14642274 [PubMed - indexed for MEDLINE]

8: Wada K, Sugimori H, Bhide PG, Moskowitz MA, Finklestein SP. Related Articles, Links

h cb h g e e e fcg b e

Effect of basic fibroblast growth factor treatment on brain progenitor cells after permanent focal ischemia in rats.
Stroke. 2003 Nov;34(11):2722-8. Epub 2003 Oct 23.
PMID: 14576381 [PubMed - indexed for MEDLINE]

9: Reali C, Curto M, Sogos V, Scintu F, Pauly S, Schwarz H, Gremo F. Related Articles, Links

Expression of CD137 and its ligand in human neurons, astrocytes, and microglia: modulation by FGF-2.
J Neurosci Res. 2003 Oct 1;74(1):67-73.
PMID: 13130507 [PubMed - indexed for MEDLINE]

10: Irvin DK, Dhaka A, Hicks C, Weinmaster G, Kornblum HI. Related Articles, Links

Extrinsic and intrinsic factors governing cell fate in cortical progenitor cultures.
Dev Neurosci. 2003 Mar-Aug;25(2-4):162-72.
PMID: 12966214 [PubMed - indexed for MEDLINE]

11: Morale MC, Gallo F, Tirolo C, L'Episcopo F, Gennuso F, Testa N, Caniglia S, Spina-Purrello V, Avola R, Scoto GM, Marchetti B. Related Articles, Links

The reproductive system at the neuroendocrine-immune interface: focus on LHRH, estrogens and growth factors in LHRH neuron-glial interactions.
Domest Anim Endocrinol. 2003 Jul;25(1):21-46. Review.
PMID: 12963097 [PubMed - indexed for MEDLINE]

12: Hagino S, Iseki K, Mori T, Zhang Y, Sakai N, Yokoya S, Hikake T, Kikuchi S, Wanaka A. Related Articles, Links

Expression pattern of glypican-1 mRNA after brain injury in mice.
Neurosci Lett. 2003 Sep 25;349(1):29-32.
PMID: 12946579 [PubMed - indexed for MEDLINE]

13: Koyama Y, Tsujikawa K, Matsuda T, Baba A. Related Articles, Links

Intracerebroventricular administration of an endothelin ETB receptor agonist increases expressions of GDNF and BDNF in rat brain.
Eur J Neurosci. 2003 Aug;18(4):887-94.
PMID: 12925014 [PubMed - indexed for MEDLINE]

14: Penkowa M, Camats J, Hadberg H, Quintana A, Rojas S, Giralt M, Molinero A, Campbell IL, Hidalgo J. Related Articles, Links

Astrocyte-targeted expression of interleukin-6 protects the central nervous system during neuroglial degeneration induced by 6-aminonicotinamide.
J Neurosci Res. 2003 Aug 15;73(4):481-96.
PMID: 12898533 [PubMed - indexed for MEDLINE]

15: Riboni L, Tettamanti G, Viani P. Related Articles, Links

Ceramide in primary astrocytes from cerebellum: metabolism and role in cell proliferation.
Cerebellum. 2002 Apr;1(2):129-35. Review.
PMID: 12882362 [PubMed - indexed for MEDLINE]

16: Reuss B, Dono R, Unsicker K. Related Articles, Links

Functions of fibroblast growth factor (FGF)-2 and FGF-5 in astroglial differentiation and blood-brain barrier permeability: evidence from mouse mutants.
J Neurosci. 2003 Jul 23;23(16):6404-12.
PMID: 12878680 [PubMed - indexed for MEDLINE]

17: Brambilla R, Cottini L, Fumagalli M, Ceruti S, Abbracchio MP. Related Articles, Links

Blockade of A2A adenosine receptors prevents basic fibroblast growth

factor-induced reactive astrogliosis in rat striatal primary astrocytes.
Glia. 2003 Aug;43(2):190-4.
PMID: 12838511 [PubMed - indexed for MEDLINE]

☐ 18: Albrecht PJ, Murtie JC, Ness JK, Redwine JM, Enterline JR, Armstrong RC, Levison SW. Related Articles, Links

Astrocytes produce CNTF during the remyelination phase of viral-induced spinal cord demyelination to stimulate FGF-2 production.
Neurobiol Dis. 2003 Jul;13(2):89-101.
PMID: 12828933 [PubMed - indexed for MEDLINE]

☐ 19: Krum JM, Khaibullina A. Related Articles, Links

Inhibition of endogenous VEGF impedes revascularization and astroglial proliferation: roles for VEGF in brain repair.
Exp Neurol. 2003 Jun;181(2):241-57.
PMID: 12781997 [PubMed - indexed for MEDLINE]

☐ 20: Trentin AG, De Aguiar CB, Garcez RC, Alvarez-Silva M. Related Articles, Links

Thyroid hormone modulates the extracellular matrix organization and expression in cerebellar astrocyte: effects on astrocyte adhesion.
Glia. 2003 Jun;42(4):359-69.
PMID: 12730956 [PubMed - indexed for MEDLINE]

☐ 21: Viti J, Feathers A, Phillips J, Lillien L. Related Articles, Links

Epidermal growth factor receptors control competence to interpret leukemia inhibitory factor as an astrocyte inducer in developing cortex.
J Neurosci. 2003 Apr 15;23(8):3385-93.
PMID: 12716946 [PubMed - indexed for MEDLINE]

☐ 22: Moroz IA, Rajabi H, Rodaros D, Stewart J. Related Articles, Links

Effects of sex and hormonal status on astrocytic basic fibroblast growth factor-2 and tyrosine hydroxylase immunoreactivity after medial forebrain bundle 6-hydroxydopamine lesions of the midbrain dopamine neurons.
Neuroscience. 2003;118(2):463-76.
PMID: 12699782 [PubMed - indexed for MEDLINE]

☐ 23: Zawadzka M, Kaminska B. Related Articles, Links

Immunosuppressant FK506 affects multiple signaling pathways and modulates gene expression in astrocytes.
Mol Cell Neurosci. 2003 Feb;22(2):202-9.
PMID: 12676530 [PubMed - indexed for MEDLINE]

☐ 24: Rolf B, Lang D, Hillenbrand R, Richter M, Schachner M, Bartsch U. Related Articles, Links

Altered expression of CHL1 by glial cells in response to optic nerve injury and intravitreal application of fibroblast growth factor-2.
J Neurosci Res. 2003 Mar 15;71(6):835-43.
PMID: 12605410 [PubMed - indexed for MEDLINE]

☐ 25: Shimazaki K, Yoshida K, Hirose Y, Ishimori H, Katayama M, Kawase T. Related Articles, Links

Cytokines regulate c-Met expression in cultured astrocytes.
Brain Res. 2003 Feb 7;962(1-2):105-10.
PMID: 12543460 [PubMed - indexed for MEDLINE]

☐ 26: Madiai F, Hussain SR, Goettl VM, Burry RW, Stephens RL Jr, Hackshaw KV. Related Articles, Links

Upregulation of FGF-2 in reactive spinal cord astrocytes following unilateral lumbar spinal nerve ligation.

Exp Brain Res. 2003 Feb;148(3):366-76. Epub 2002 Nov 26.
PMID: 12541147 [PubMed - indexed for MEDLINE]

☐ 27: Brown RC, Mark KS, Egleton RD, Huber JD, Burroughs AR, Davis TP. Related Articles, Links

Protection against hypoxia-induced increase in blood-brain barrier permeability: role of tight junction proteins and NFkappaB.
J Cell Sci. 2003 Feb 15;116(Pt 4):693-700.
PMID: 12538770 [PubMed - indexed for MEDLINE]

☐ 28: Cetin N, Ball K, Gokden M, Cruz NF, Diemel GA. Related Articles, Links

Effect of reactive cell density on net [2-14C]acetate uptake into rat brain: labeling of clusters containing GFAP+- and lectin+-immunoreactive cells.
Neurochem Int. 2003 Apr;42(5):359-74.
PMID: 12510019 [PubMed - indexed for MEDLINE]

☐ 29: de Sampaio e Spohr TC, Martinez R, da Silva EF, Neto VM, Gomes FC. Related Articles, Links

Neuro-glia interaction effects on GFAP gene: a novel role for transforming growth factor-beta1.
Eur J Neurosci. 2002 Dec;16(11):2059-69.
PMID: 12473073 [PubMed - indexed for MEDLINE]

☐ 30: Malchinkhuu E, Sato K, Muraki T, Ishikawa K, Kuwabara A, Okajima F. Related Articles, Links

Assessment of the role of sphingosine 1-phosphate and its receptors in high-density lipoprotein-induced stimulation of astroglial cell function.
Biochem J. 2003 Mar 15;370(Pt 3):817-27.
PMID: 12470300 [PubMed - indexed for MEDLINE]

☐ 31: Avola R, Cormaci G, Mazzone V, Denaro L, Mignini F, Tomassoni D, Zaccheo D. Related Articles, Links

Effect of growth factors on DNA labeling and cytoskeletal protein expression in 17-beta-estradiol and basic fibroblast growth factor pre-treated astrocyte cultures.
Clin Exp Hypertens. 2002 Oct-Nov;24(7-8):753-67.
PMID: 12450249 [PubMed - indexed for MEDLINE]

☐ 32: Hermanson O, Jepsen K, Rosenfeld MG. Related Articles, Links

N-CoR controls differentiation of neural stem cells into astrocytes.
Nature. 2002 Oct 31;419(6910):934-9. Epub 2002 Oct 16.
PMID: 12410313 [PubMed - indexed for MEDLINE]

☐ 33: Buytaert-Hoefen KA, Kreber LA, Millar CJ, Walsh UT, Brannigan C, Hernandez TD. Related Articles, Links

Propentofylline after focal cortical lesion in the rat: impact on functional recovery and basic fibroblast growth factor expression.
Neurosci Lett. 2002 Oct 18;331(3):188-92.
PMID: 12383928 [PubMed - indexed for MEDLINE]

☐ 34: Galbiati M, Martini L, Melcangi RC. Related Articles, Links

Oestrogens, via transforming growth factor alpha, modulate basic fibroblast growth factor synthesis in hypothalamic astrocytes: in vitro observations.
J Neuroendocrinol. 2002 Oct;14(10):829-35.
PMID: 12372008 [PubMed - indexed for MEDLINE]

☐ 35: Mehler MF. Related Articles, Links

Mechanisms regulating lineage diversity during mammalian cerebral cortical neurogenesis and gliogenesis.

Results Probl Cell Differ. 2002;39:27-52. Review.
PMID: 12357985 [PubMed - indexed for MEDLINE]

☐ **36:** Dietrich J, Noble M, Mayer-Proschel M. Related Articles, Links

Characterization of A2B5+ glial precursor cells from cryopreserved human fetal brain progenitor cells.
Glia. 2002 Oct;40(1):65-77.
PMID: 12237844 [PubMed - indexed for MEDLINE]

☐ **37:** Schumm MA, Castellanos DA, Frydel BR, Sagen J. Related Articles, Links

Enhanced viability and neuronal differentiation of neural progenitors by chromaffin cell co-culture.
Brain Res Dev Brain Res. 2002 Aug 30;137(2):115-25.
PMID: 12220703 [PubMed - indexed for MEDLINE]

☐ **38:** Winkler S, Stahl RC, Carey DJ, Bansal R. Related Articles, Links

Syndecan-3 and perlecan are differentially expressed by progenitors and mature oligodendrocytes and accumulate in the extracellular matrix.
J Neurosci Res. 2002 Aug 15;69(4):477-87.
PMID: 12210841 [PubMed - indexed for MEDLINE]

☐ **39:** Flores C, Stewart J, Salmaso N, Zhang Y, Boksa P. Related Articles, Links

Astrocytic basic fibroblast growth factor expression in dopaminergic regions after perinatal anoxia.
Biol Psychiatry. 2002 Aug 15;52(4):362-70.
PMID: 12208644 [PubMed - indexed for MEDLINE]

☐ **40:** Bayatti N, Engele J. Related Articles, Links

Cyclic AMP differentially regulates the expression of fibroblast growth factor and epidermal growth factor receptors in cultured cortical astroglia.
Neuroscience. 2002;114(1):81-9.
PMID: 12207956 [PubMed - indexed for MEDLINE]

☐ **41:** Abbott NJ. Related Articles, Links

Astrocyte-endothelial interactions and blood-brain barrier permeability.
J Anat. 2002 Jun;200(6):629-38. Review.
PMID: 12162730 [PubMed - indexed for MEDLINE]

☐ **42:** Smith L, Gross J, Morest DK. Related Articles, Links

Fibroblast growth factors (FGFs) in the cochlear nucleus of the adult mouse following acoustic overstimulation.
Hear Res. 2002 Jul;169(1-2):1-12.
PMID: 12121735 [PubMed - indexed for MEDLINE]

☐ **43:** Miller MW, Luo J. Related Articles, Links

Effects of ethanol and basic fibroblast growth factor on the transforming growth factor beta1 regulated proliferation of cortical astrocytes and C6 astrocytoma cells.
Alcohol Clin Exp Res. 2002 May;26(5):671-6.
PMID: 12045475 [PubMed - indexed for MEDLINE]

☐ **44:** Alvarez JI, Colegial CH, Castano CA, Trujillo J, Teale JM, Restrepo BI. Related Articles, Links

The human nervous tissue in proximity to granulomatous lesions induced by Taenia solium metacestodes displays an active response.
J Neuroimmunol. 2002 Jun;127(1-2):139-44.
PMID: 12044985 [PubMed - indexed for MEDLINE]

45: Petersson KH, Pinar H, Stopa EG, Faris RA, Sadowska GB, Hanumara RC, Stonestreet BS. Related Articles, Links

White matter injury after cerebral ischemia in ovine fetuses.
Pediatr Res. 2002 Jun;51(6):768-76.
PMID: 12032276 [PubMed - indexed for MEDLINE]

46: Dhandapani KM, Wade MF, Mahesh VB, Brann DW. Related Articles, Links

Basic fibroblast growth factor induces TGF-beta release in an isoform and glioma-specific manner.
Neuroreport. 2002 Feb 11;13(2):239-41.
PMID: 11893917 [PubMed - indexed for MEDLINE]

47: Alexander CL, Fitzgerald UF, Barnett SC. Related Articles, Links

Identification of growth factors that promote long-term proliferation of olfactory ensheathing cells and modulate their antigenic phenotype.
Glia. 2002 Mar 15;37(4):349-64.
PMID: 11870874 [PubMed - indexed for MEDLINE]

48: Spina Purrello V, Cormaci G, Denaro L, Reale S, Costa A, Lalicata C, Sabbatini M, Marchetti B, Avola R. Related Articles, Links

Effect of growth factors on nuclear and mitochondrial ADP-ribosylation processes during astroglial cell development and aging in culture.
Mech Ageing Dev. 2002 Mar 15;123(5):511-20.
PMID: 11796136 [PubMed - indexed for MEDLINE]

49: Goddard DR, Berry M, Kirvell SL, Butt AM. Related Articles, Links

Fibroblast growth factor-2 induces astroglial and microglial reactivity in vivo.
J Anat. 2002 Jan;200(Pt 1):57-67.
PMID: 11833655 [PubMed - indexed for MEDLINE]

50: Le R, Esquenazi S. Related Articles, Links

Astrocytes mediate cerebral cortical neuronal axon and dendrite growth, in part, by release of fibroblast growth factor.
Neurol Res. 2002 Jan;24(1):81-92.
PMID: 11783758 [PubMed - indexed for MEDLINE]

51: Giralt M, Penkowa M, Lago N, Molinero A, Hidalgo J. Related Articles, Links

Metallothionein-1+2 protect the CNS after a focal brain injury.
Exp Neurol. 2002 Jan;173(1):114-28.
PMID: 11771944 [PubMed - indexed for MEDLINE]

52: Albrecht PJ, Dahl JP, Stoltzfus OK, Levenson R, Levison SW. Related Articles, Links

Ciliary neurotrophic factor activates spinal cord astrocytes, stimulating their production and release of fibroblast growth factor-2, to increase motor neuron survival.
Exp Neurol. 2002 Jan;173(1):46-62.
PMID: 11771938 [PubMed - indexed for MEDLINE]

53: Liesi P, Kauppila T. Related Articles, Links

Induction of type IV collagen and other basement-membrane-associated proteins after spinal cord injury of the adult rat may participate in formation of the glial scar.
Exp Neurol. 2002 Jan;173(1):31-45.
PMID: 11771937 [PubMed - indexed for MEDLINE]

54: Givogri MI, Bongarzone ER, Schonmann V, Campagnoni AT. Related Articles, Links

Expression and regulation of golli products of myelin basic protein gene

during in vitro development of oligodendrocytes.
J Neurosci Res. 2001 Nov 15;66(4):679-90.
PMID: 11746388 [PubMed - indexed for MEDLINE]

55: Melcangi RC, Cavarretta I, Magnaghi V, Martini L, Galbiati M. Related Articles, Links

Interactions between growth factors and steroids in the control of LHRH-secreting neurons.
Brain Res Brain Res Rev. 2001 Nov;37(1-3):223-34. Review.
PMID: 11744088 [PubMed - indexed for MEDLINE]

56: Suzuki K, Ikegaya Y, Matsuura S, Kanai Y, Endou H, Matsuki N. Related Articles, Links

Transient upregulation of the glial glutamate transporter GLAST in response to fibroblast growth factor, insulin-like growth factor and epidermal growth factor in cultured astrocytes.
J Cell Sci. 2001 Oct;114(Pt 20):3717-25.
PMID: 11707523 [PubMed - indexed for MEDLINE]

57: Nakajima K, Hida H, Shimano Y, Fujimoto I, Hashitani T, Kumazaki M, Sakurai T, Nishino H. Related Articles, Links

GDNF is a major component of trophic activity in DA-depleted striatum for survival and neurite extension of DAergic neurons.
Brain Res. 2001 Oct 19;916(1-2):76-84.
PMID: 11597593 [PubMed - indexed for MEDLINE]

58: Trentin AG, Alvarez-Silva M, Moura Neto V. Related Articles, Links

Thyroid hormone induces cerebellar astrocytes and C6 glioma cells to secrete mitogenic growth factors.
Am J Physiol Endocrinol Metab. 2001 Nov;281(5):E1088-94.
PMID: 11595667 [PubMed - indexed for MEDLINE]

59: Leme RJ, Chadi G. Related Articles, Links

Distant microglial and astroglial activation secondary to experimental spinal cord lesion.
Arq Neuropsiquiatr. 2001 Sep;59(3-A):483-92.
PMID: 11588623 [PubMed - indexed for MEDLINE]

60: Chang JW, Young DA, Coleman PD, O'Banion MK. Related Articles, Links

Two-dimensional gel analysis of secreted proteins induced by interleukin-1 beta in rat astrocytes.
Neurochem Int. 2001 Nov-Dec;39(5-6):349-59.
PMID: 11578770 [PubMed - indexed for MEDLINE]

61: Bayatti N, Engele J. Related Articles, Links

Cyclic AMP modulates the response of central nervous system glia to fibroblast growth factor-2 by redirecting signalling pathways.
J Neurochem. 2001 Sep;78(5):972-80.
PMID: 11553671 [PubMed - indexed for MEDLINE]

62: Reimers D, Lopez-Toledano MA, Mason I, Cuevas P, Redondo C, Herranz AS, Lobo MV, Bazan E. Related Articles, Links

Developmental expression of fibroblast growth factor (FGF) receptors in neural stem cell progeny. Modulation of neuronal and glial lineages by basic FGF treatment.
Neurol Res. 2001 Sep;23(6):612-21.
PMID: 11547930 [PubMed - indexed for MEDLINE]

63: Franceschini IA, Feigenbaum-Lacombe V, Casanova P, Lopez-Lastra M, Darlix JL, Dalcq MD. Related Articles, Links

Efficient gene transfer in mouse neural precursors with a bicistronic retroviral vector.
J Neurosci Res. 2001 Aug 1;65(3):208-19.
PMID: 11494355 [PubMed - indexed for MEDLINE]

64: Hugnot JP, Mellodew K, Pilcher H, Uwanogho D, Price J, Sinden JD. Related Articles, Links

Direct cell-cell interactions control apoptosis and oligodendrocyte marker expression of neuroepithelial cells.
J Neurosci Res. 2001 Aug 1;65(3):195-207.
PMID: 11494354 [PubMed - indexed for MEDLINE]

65: Suzuki S, Li AJ, Ishisaki A, Hou X, Hasegawa M, Fukumura M, Akaike T, Imamura T. Related Articles, Links

Feeding suppression by fibroblast growth factor-1 is accompanied by selective induction of heat shock protein 27 in hypothalamic astrocytes.
Eur J Neurosci. 2001 Jun;13(12):2299-308.
PMID: 11454034 [PubMed - indexed for MEDLINE]

66: Hugnot JP, Pilcher H, Rashid-Doubell F, Sinden J, Price J. Related Articles, Links

Regulation of glial differentiation of MHP36 neural multipotent cell line.
Neuroreport. 2001 Jul 20;12(10):2237-41.
PMID: 11447341 [PubMed - indexed for MEDLINE]

67: Lenz G, Goncalves D, Luo Z, Avruch J, Rodnight R, Neary JT. Related Articles, Links

Extracellular ATP stimulates an inhibitory pathway towards growth factor-induced cRaf-1 and MEKK activation in astrocyte cultures.
J Neurochem. 2001 May;77(4):1001-9.
PMID: 11359865 [PubMed - indexed for MEDLINE]

68: Caldwell MA, He X, Wilkie N, Pollack S, Marshall G, Wafford KA, Svendsen CN Related Articles, Links

Growth factors regulate the survival and fate of cells derived from human neurospheres.
Nat Biotechnol. 2001 May;19(5):475-9.
PMID: 11329020 [PubMed - indexed for MEDLINE]

69: Wei OY, Huang YL, Da CD, Cheng JS. Related Articles, Links

Alteration of basic fibroblast growth factor expression in rat during cerebral ischemia.
Acta Pharmacol Sin. 2000 Apr;21(4):296-300.
PMID: 11324453 [PubMed - indexed for MEDLINE]

70: Walsh N, Valter K, Stone J. Related Articles, Links

Cellular and subcellular patterns of expression of bFGF and CNTF in the normal and light stressed adult rat retina.
Exp Eye Res. 2001 May;72(5):495-501.
PMID: 11311041 [PubMed - indexed for MEDLINE]

71: Kubota N, Kiuchi Y, Nemoto M, Oyamada H, Ohno M, Funahashi H, Shioda S, Oguchi K. Related Articles, Links

Regulation of serotonin transporter gene expression in human glial cells by growth factors.
Eur J Pharmacol. 2001 Apr 6;417(1-2):69-76.
PMID: 11301061 [PubMed - indexed for MEDLINE]

72: Riboni L, Viani P, Bassi R, Giussani P, Tettamanti G. Related Articles, Links

Basic fibroblast growth factor-induced proliferation of primary astrocytes. evidence for the involvement of sphingomyelin biosynthesis.

J Biol Chem. 2001 Apr 20;276(16):12797-804. Epub 2001 Jan 22.
PMID: 11278937 [PubMed - indexed for MEDLINE]

73: Liu X, Zheng SX, Zhou LJ, Zhu XZ. Related Articles, Links

Basic fibroblast growth factor up-regulates the expression of vascular endothelial growth factor in primary cultured rat astrocytes.
Acta Pharmacol Sin. 2000 Jan;21(1):19-22.
PMID: 11263242 [PubMed - indexed for MEDLINE]

74: Di Prospero NA, Zhou XR, Meiners S, McAuliffe WG, Ho SY, Geller HM. Related Articles, Links

Suramin disrupts the gliotic response following a stab wound injury to the adult rat brain.
J Neurocytol. 1998;27(7):491-506.
PMID: 11246489 [PubMed - indexed for MEDLINE]

75: Buytaert KA, Kline AE, Montanez S, Likler E, Millar CJ, Hernandez TD. Related Articles, Links

The temporal patterns of c-Fos and basic fibroblast growth factor expression following a unilateral anteromedial cortex lesion.
Brain Res. 2001 Mar 9;894(1):121-30.
PMID: 11245822 [PubMed - indexed for MEDLINE]

76: Magnaghi V, Riva MA, Cavarretta I, Martini L, Melcangi RC. Related Articles, Links

Corticosteroids regulate the gene expression of FGF-1 and FGF-2 in cultured rat astrocytes.
J Mol Neurosci. 2000 Aug;15(1):11-8.
PMID: 11211233 [PubMed - indexed for MEDLINE]

77: Plant GW, Harvey AR. Related Articles, Links

A new type of biocompatible bridging structure supports axon regrowth after implantation into the lesioned rat optic tract.
Cell Transplant. 2000 Nov-Dec;9(6):759-72.
PMID: 11202563 [PubMed - indexed for MEDLINE]

78: Tanigaki K, Nogaki F, Takahashi J, Tashiro K, Kurooka H, Honjo T. Related Articles, Links

Notch1 and Notch3 instructively restrict bFGF-responsive multipotent neural progenitor cells to an astroglial fate.
Neuron. 2001 Jan;29(1):45-55.
PMID: 11182080 [PubMed - indexed for MEDLINE]

79: Suzuki S, Li AJ, Akaike T, Imamura T. Related Articles, Links

Intracerebroventricular infusion of fibroblast growth factor-1 increases Fos immunoreactivity in periventricular astrocytes in rat hypothalamus.
Neurosci Lett. 2001 Mar 2;300(1):29-32.
PMID: 11172932 [PubMed - indexed for MEDLINE]

80: Mercier F, Hatton GI. Related Articles, Links

Connexin 26 and basic fibroblast growth factor are expressed primarily in the subpial and subependymal layers in adult brain parenchyma: roles in stem cell proliferation and morphological plasticity?
J Comp Neurol. 2001 Feb 26;431(1):88-104.
PMID: 11169992 [PubMed - indexed for MEDLINE]

81: Smith C, Berry M, Clarke WE, Logan A. Related Articles, Links

Differential expression of fibroblast growth factor-2 and fibroblast growth factor receptor 1 in a scarring and nonscarring model of CNS injury in the

rat.
Eur J Neurosci. 2001 Feb;13(3):443-56.
PMID: 11168551 [PubMed - indexed for MEDLINE]

☐ **82:** Clarke WE, Berry M, Smith C, Kent A, Logan A. Related Articles, Links

Coordination of fibroblast growth factor receptor 1 (FGFR1) and fibroblast growth factor-2 (FGF-2) trafficking to nuclei of reactive astrocytes around cerebral lesions in adult rats.
Mol Cell Neurosci. 2001 Jan;17(1):17-30.
PMID: 11161466 [PubMed - indexed for MEDLINE]

☐ **83:** Avola R, Spina-Purrello V, Gallo F, Morale MC, Marletta N, Costa A, Tirolo C, Testa N, Reale S, Marchetti B. Related Articles, Links

Immortalized hypothalamic luteinizing hormone-releasing hormone (LHRH) neurons induce a functional switch in the growth factor responsiveness of astroglia: involvement of basic fibroblast growth factor.
Int J Dev Neurosci. 2000 Dec;18(8):743-63.
PMID: 11154844 [PubMed - indexed for MEDLINE]

☐ **84:** Reuss B, Unsicker K. Related Articles, Links

Survival and differentiation of dopaminergic mesencephalic neurons are promoted by dopamine-mediated induction of FGF-2 in striatal astroglial cells.
Mol Cell Neurosci. 2000 Dec;16(6):781-92.
PMID: 11124897 [PubMed - indexed for MEDLINE]

☐ **85:** Levison SW, Jiang FJ, Stoltzfus OK, Ducceschi MH. Related Articles, Links

IL-6-type cytokines enhance epidermal growth factor-stimulated astrocyte proliferation.
Glia. 2000 Dec;32(3):328-37.
PMID: 11102972 [PubMed - indexed for MEDLINE]

☐ **86:** Bongarzone ER, Byravan S, Givogri MI, Schonmann V, Campagnoni AT. Related Articles, Links

Platelet-derived growth factor and basic fibroblast growth factor regulate cell proliferation and the expression of notch-1 receptor in a new oligodendrocyte cell line.
J Neurosci Res. 2000 Nov 1;62(3):319-28.
PMID: 11054800 [PubMed - indexed for MEDLINE]

☐ **87:** O'Connor SM, Stenger DA, Shaffer KM, Maric D, Barker JL, Ma W. Related Articles, Links

Primary neural precursor cell expansion, differentiation and cytosolic Ca (2+) response in three-dimensional collagen gel.
J Neurosci Methods. 2000 Oct 30;102(2):187-95.
PMID: 11040415 [PubMed - indexed for MEDLINE]

☐ **88:** Senior K. Related Articles, Links

Putting nerve cell development into reverse.
Lancet. 2000 Sep 9;356(9233):915. No abstract available.
PMID: 11036903 [PubMed - indexed for MEDLINE]

☐ **89:** Scarisbrick IA, Asakura K, Rodriguez M. Related Articles, Links

Neurotrophin-4/5 promotes proliferation of oligodendrocyte-type-2 astrocytes (O-2A).
Brain Res Dev Brain Res. 2000 Sep 30;123(1):87-90.
PMID: 11020553 [PubMed - indexed for MEDLINE]

☐ **90:** Riboni L, Viani P, Bassi R, Stabilini A, Tettamanti G. Related Articles, Links

Biomodulatory role of ceramide in basic fibroblast growth factor-induced proliferation of cerebellar astrocytes in primary culture.
Glia. 2000 Nov;32(2):137-45.
PMID: 11008213 [PubMed - indexed for MEDLINE]

91: Sortwell CE, Daley BF, Pitzer MR, McGuire SO, Sladek JR Jr, Collier TJ. Related Articles, Links

Oligodendrocyte-type 2 astrocyte-derived trophic factors increase survival of developing dopamine neurons through the inhibition of apoptotic cell death.
J Comp Neurol. 2000 Oct 9;426(1):143-53.
PMID: 10980489 [PubMed - indexed for MEDLINE]

92: Kondo T, Raff M. Related Articles, Links

Oligodendrocyte precursor cells reprogrammed to become multipotential CNS stem cells.
Science. 2000 Sep 8;289(5485):1754-7.
PMID: 10976069 [PubMed - indexed for MEDLINE]

93: Casanovas A, Olmos G, Ribera J, Boronat MA, Esquerda JE, Garcia-Sevilla JA. Related Articles, Links

Induction of reactive astrocytosis and prevention of motoneuron cell death by the I(2)-imidazoline receptor ligand LSL 60101.
Br J Pharmacol. 2000 Aug;130(8):1767-76.
PMID: 10952664 [PubMed - indexed for MEDLINE]

94: Rosser AE, Tyers P, Dunnett SB. Related Articles, Links

The morphological development of neurons derived from EGF- and FGF-2-driven human CNS precursors depends on their site of integration in the neonatal rat brain.
Eur J Neurosci. 2000 Jul;12(7):2405-13.
PMID: 10947819 [PubMed - indexed for MEDLINE]

95: King LA, Mitrophanous KA, Clark LA, Kim VN, Rohll JB, Kingsman AJ, Colello RJ. Related Articles, Links

Growth factor enhanced retroviral gene transfer to the adult central nervous system.
Gene Ther. 2000 Jul;7(13):1103-11.
PMID: 10918476 [PubMed - indexed for MEDLINE]

96: Learish RD, Bruss MD, Haak-Frendscho M. Related Articles, Links

Inhibition of mitogen-activated protein kinase kinase blocks proliferation of neural progenitor cells.
Brain Res Dev Brain Res. 2000 Jul 30;122(1):97-109.
PMID: 10915910 [PubMed - indexed for MEDLINE]

97: Rabchevsky AG, Fugaccia I, Turner AF, Blades DA, Mattson MP, Scheff SW. Related Articles, Links

Basic fibroblast growth factor (bFGF) enhances functional recovery following severe spinal cord injury to the rat.
Exp Neurol. 2000 Aug;164(2):280-91.
PMID: 10915567 [PubMed - indexed for MEDLINE]

98: Cohen RI, Chandross KJ. Related Articles, Links

Fibroblast growth factor-9 modulates the expression of myelin related proteins and multiple fibroblast growth factor receptors in developing oligodendrocytes.
J Neurosci Res. 2000 Aug 1;61(3):273-87.
PMID: 10900074 [PubMed - indexed for MEDLINE]

99: Reuss B, Leung DS, Ohlemeyer C, Kettenmann H, Unsicker K. Related Articles, Links

Regionally distinct regulation of astroglial neurotransmitter receptors by fibroblast growth factor-2.
Mol Cell Neurosci. 2000 Jul;16(1):42-58.
PMID: 10882482 [PubMed - indexed for MEDLINE]

100: Flores C, Stewart J. Related Articles, Links

Changes in astrocytic basic fibroblast growth factor expression during and after prolonged exposure to escalating doses of amphetamine.
Neuroscience. 2000;98(2):287-93.
PMID: 10854759 [PubMed - indexed for MEDLINE]

101: Romero MI, Rangappa N, Li L, Lightfoot E, Garry MG, Smith GM Related Articles, Links

Extensive sprouting of sensory afferents and hyperalgesia induced by conditional expression of nerve growth factor in the adult spinal cord.
J Neurosci. 2000 Jun 15;20(12):4435-45. Erratum in: J Neurosci 2000 Nov 15;20(22):1b.

PMID: 10844012 [PubMed - indexed for MEDLINE]

102: Pataky DM, Borisoff JF, Fernandes KJ, Tetzlaff W, Steeves JD. Related Articles, Links

Fibroblast growth factor treatment produces differential effects on survival and neurite outgrowth from identified bulbospinal neurons in vitro.
Exp Neurol. 2000 Jun;163(2):357-72.
PMID: 10833309 [PubMed - indexed for MEDLINE]

103: Gallo F, Morale MC, Spina-Purrello V, Tirolo C, Testa N, Farinella Z, Avola R, Beaudet A, Marchetti B. Related Articles, Links

Basic fibroblast growth factor (bFGF) acts on both neurons and glia to mediate the neurotrophic effects of astrocytes on LHRH neurons in culture.
Synapse. 2000 Jun 15;36(4):233-53.
PMID: 10819902 [PubMed - indexed for MEDLINE]

104: Amoureux MC, Cunningham BA, Edelman GM, Crossin KL. Related Articles, Links

N-CAM binding inhibits the proliferation of hippocampal progenitor cells and promotes their differentiation to a neuronal phenotype.
J Neurosci. 2000 May 15;20(10):3631-40.
PMID: 10804205 [PubMed - indexed for MEDLINE]

105: Grinspan JB, Edell E, Carpio DF, Beesley JS, Lavy L, Pleasure D, Golden JA. Related Articles, Links

Stage-specific effects of bone morphogenetic proteins on the oligodendrocyte lineage.
J Neurobiol. 2000 Apr;43(1):1-17.
PMID: 10756062 [PubMed - indexed for MEDLINE]

106: Lee YL, Shih K, Bao P, Ghirnikar RS, Eng LF. Related Articles, Links

Cytokine chemokine expression in contused rat spinal cord.
Neurochem Int. 2000 Apr;36(4-5):417-25.
PMID: 10733009 [PubMed - indexed for MEDLINE]

107: Montanez S, Kline AE, Gasser TA, Hernandez TD. Related Articles, Links

Phenobarbital administration directed against kindled seizures delays functional recovery following brain insult.
Brain Res. 2000 Mar 31;860(1-2):29-40.
PMID: 10727621 [PubMed - indexed for MEDLINE]

108: Bury SD, Eichhorn AC, Kotzer CM, Jones TA. Related Articles, Links

Reactive astrocytic responses to denervation in the motor cortex of adult rats are sensitive to manipulations of behavioral experience.
Neuropharmacology. 2000 Mar 3;39(5):743-55.
PMID: 10699441 [PubMed - indexed for MEDLINE]

109: Sanders VJ, Everall IP, Johnson RW, Masliah E. Related Articles, Links

Fibroblast growth factor modulates HIV coreceptor CXCR4 expression by neural cells. HNRC Group.
J Neurosci Res. 2000 Mar 1;59(5):671-9.
PMID: 10686595 [PubMed - indexed for MEDLINE]

110: Pardo B, Honegger P. Related Articles, Links

Differentiation of rat striatal embryonic stem cells in vitro: monolayer culture vs. three-dimensional coculture with differentiated brain cells.
J Neurosci Res. 2000 Feb 15;59(4):504-12.
PMID: 10679789 [PubMed - indexed for MEDLINE]

111: Zhu G, Mehler MF, Mabie PC, Kessler JA. Related Articles, Links

Developmental changes in neural progenitor cell lineage commitment do not depend on epidermal growth factor receptor signaling.
J Neurosci Res. 2000 Feb 1;59(3):312-20.
PMID: 10679766 [PubMed - indexed for MEDLINE]

112: Yamada H, Yamada E, Ando A, Seo MS, Esumi N, Okamoto N, Vinores M, LaRochelle W, Zack DJ, Campochiaro PA. Related Articles, Links

Platelet-derived growth factor-A-induced retinal gliosis protects against ischemic retinopathy.
Am J Pathol. 2000 Feb;156(2):477-87.
PMID: 10666377 [PubMed - indexed for MEDLINE]

113: Hajihosseini MK, Dickson C. Related Articles, Links

A subset of fibroblast growth factors (Fgfs) promote survival, but Fgf-8b specifically promotes astroglial differentiation of rat cortical precursor cells.
Mol Cell Neurosci. 1999 Dec;14(6):468-85.
PMID: 10656254 [PubMed - indexed for MEDLINE]

114: Silva A, Montague JR, Lopez TF, Mudd LM. Related Articles, Links

Growth factor effects on survival and development of calbindin immunopositive cultured septal neurons.
Brain Res Bull. 2000 Jan 1;51(1):35-42.
PMID: 10654578 [PubMed - indexed for MEDLINE]

115: Sato K, Ishikawa K, Ui M, Okajima F. Related Articles, Links

Sphingosine 1-phosphate induces expression of early growth response-1 and fibroblast growth factor-2 through mechanism involving extracellular signal-regulated kinase in astroglial cells.
Brain Res Mol Brain Res. 1999 Dec 10;74(1-2):182-9.
PMID: 10640689 [PubMed - indexed for MEDLINE]

116: Flores C, Samaha AN, Stewart J. Related Articles, Links

Requirement of endogenous basic fibroblast growth factor for sensitization to amphetamine.
J Neurosci. 2000 Jan 15;20(2):RC55.
PMID: 10632621 [PubMed - indexed for MEDLINE]

Sobue K, Yamamoto N, Yoneda K, Hodgson ME, Yamashiro K.

117: Tsuruoka N, Tsuda T, Katsuya H, Miura Y, Asai K, Kato T. Related Articles, Links

Induction of blood-brain barrier properties in immortalized bovine brain endothelial cells by astrocytic factors.
Neurosci Res. 1999 Nov;35(2):155-64.
PMID: 10616919 [PubMed - indexed for MEDLINE]

118: Inazu M, Takeda H, Ikoshi H, Uchida Y, Kubota N, Kiuchi Y, Oguchi K, Matsumiya T. Related Articles, Links

Regulation of dopamine uptake by basic fibroblast growth factor and epidermal growth factor in cultured rat astrocytes.
Neurosci Res. 1999 Sep;34(4):235-44.
PMID: 10576546 [PubMed - indexed for MEDLINE]

119: Milner R, Huang X, Wu J, Nishimura S, Pytela R, Sheppard D, ffrench-Constant C. Related Articles, Links

Distinct roles for astrocyte alphavbeta5 and alphavbeta8 integrins in adhesion and migration.
J Cell Sci. 1999 Dec;112 (Pt 23):4271-9.
PMID: 10564645 [PubMed - indexed for MEDLINE]

120: Minoshima T, Nakanishi S. Related Articles, Links

Structural organization of the mouse metabotropic glutamate receptor subtype 3 gene and its regulation by growth factors in cultured cortical astrocytes.
J Biochem (Tokyo). 1999 Nov;126(5):889-96.
PMID: 10544282 [PubMed - indexed for MEDLINE]

121: Liu X, Zhu XZ. Related Articles, Links

Increased expression and nuclear accumulation of basic fibroblast growth factor in primary cultured astrocytes following ischemic-like insults.
Brain Res Mol Brain Res. 1999 Aug 25;71(2):171-7.
PMID: 10521571 [PubMed - indexed for MEDLINE]

122: Rabchevsky AG, Fugaccia I, Fletcher-Turner A, Blades DA, Mattson MP, Scheff SW. Related Articles, Links

Basic fibroblast growth factor (bFGF) enhances tissue sparing and functional recovery following moderate spinal cord injury.
J Neurotrauma. 1999 Sep;16(9):817-30.
PMID: 10521141 [PubMed - indexed for MEDLINE]

123: Culmsee C, Stumm RK, Schafer MK, Weihe E, Krieglstein J. Related Articles, Links

Clenbuterol induces growth factor mRNA, activates astrocytes, and protects rat brain tissue against ischemic damage.
Eur J Pharmacol. 1999 Aug 20;379(1):33-45.
PMID: 10499369 [PubMed - indexed for MEDLINE]

124: Zhu G, Mehler MF, Mabie PC, Kessler JA. Related Articles, Links

Developmental changes in progenitor cell responsiveness to cytokines.
J Neurosci Res. 1999 Apr 15;56(2):131-45.
PMID: 10494102 [PubMed - indexed for MEDLINE]

125: Flores C, Salmaso N, Cain S, Rodaros D, Stewart J. Related Articles, Links

Ovariectomy of adult rats leads to increased expression of astrocytic basic fibroblast growth factor in the ventral tegmental area and in dopaminergic projection regions of the entorhinal and prefrontal cortex.
J Neurosci. 1999 Oct 1;19(19):8665-73.
PMID: 10493767 [PubMed - indexed for MEDLINE]

126: Yang WQ, Huang YL, Da CD, Cheng JS. Related Articles, Links

Electroacupuncture reduces rat's neuronal ischemic injury and enhances the expression of basic fibroblast growth factor.
Acupunct Electrother Res. 1999;24(1):1-10.
PMID: 10472818 [PubMed - indexed for MEDLINE]

127: Kawahara N, Ruetzler CA, Mies G, Klatzo I. Related Articles, Links

Cortical spreading depression increases protein synthesis and upregulates basic fibroblast growth factor.
Exp Neurol. 1999 Jul;158(1):27-36.
PMID: 10448415 [PubMed - indexed for MEDLINE]

128: Riva MA, Molteni R, Tascedda F, Massironi A, Racagni G. Related Articles, Links

Selective modulation of fibroblast growth factor-2 expression in the rat brain by the atypical antipsychotic clozapine.
Neuropharmacology. 1999 Jul;38(7):1075-82.
PMID: 10428426 [PubMed - indexed for MEDLINE]

129: Garcia de Yebenes E, Ho A, Damani T, Fillit H, Blum M. Related Articles, Links

Regulation of the heparan sulfate proteoglycan, perlecan, by injury and interleukin-1alpha.
J Neurochem. 1999 Aug;73(2):812-20.
PMID: 10428080 [PubMed - indexed for MEDLINE]

130: Gomide VC, Chadi G. Related Articles, Links

The trophic factors S-100beta and basic fibroblast growth factor are increased in the forebrain reactive astrocytes of adult callosotomized rat.
Brain Res. 1999 Jul 24;835(2):162-74.
PMID: 10415371 [PubMed - indexed for MEDLINE]

131: Boven LA, Middel J, Portegies P, Verhoef J, Jansen GH, Nottet HS. Related Articles, Links

Overexpression of nerve growth factor and basic fibroblast growth factor in AIDS dementia complex.
J Neuroimmunol. 1999 Jun 1;97(1-2):154-62.
PMID: 10408969 [PubMed - indexed for MEDLINE]

132: Tatebayashi Y, Iqbal K, Grundke-Iqbal I. Related Articles, Links

Dynamic regulation of expression and phosphorylation of tau by fibroblast growth factor-2 in neural progenitor cells from adult rat hippocampus.
J Neurosci. 1999 Jul 1;19(13):5245-54.
PMID: 10377336 [PubMed - indexed for MEDLINE]

133: Gomez-Pinilla F, Dao L. Related Articles, Links

Diazepam induces FGF-2 and its mRNA in the spinal cord.
Neuroreport. 1999 Apr 26;10(6):1273-6.
PMID: 10363938 [PubMed - indexed for MEDLINE]

134: Welch WC, Komblith PL, Zimmerman HM, Bradley MK. Related Articles, Links

Variability of intracellular concentrations of basic fibroblast growth factor in cultured human gliomas.
In Vivo. 1999 Mar-Apr;13(2):109-18.
PMID: 10363165 [PubMed - indexed for MEDLINE]

135: Panchision DM, Martin-DeLeon PA, Takeshima T, Johnston JM, Shimoda K, Tsoulfas P, McKay RD, Commissiong JW. Related Articles, Links

An immortalized, type-1 astrocyte of mesencephalic origin source of a

dopaminergic neurotrophic factor.
J Mol Neurosci. 1998 Dec;11(3):209-21.
PMID: 10344791 [PubMed - indexed for MEDLINE]

136: Pallud S, Ramauge M, Gavaret JM, Lennon AM, Munsch N, St Germain DL, Pierre M, Courtin F. Related Articles, Links

Regulation of type 3 iodothyronine deiodinase expression in cultured rat astrocytes: role of the Erk cascade.
Endocrinology. 1999 Jun;140(6):2917-23.
PMID: 10342885 [PubMed - indexed for MEDLINE]

137: Silverman WF, Krum JM, Mani N, Rosenstein JM. Related Articles, Links

Vascular, glial and neuronal effects of vascular endothelial growth factor in mesencephalic explant cultures.
Neuroscience. 1999;90(4):1529-41.
PMID: 10338318 [PubMed - indexed for MEDLINE]

138: Kalman D, Gomperts SN, Hardy S, Kitamura M, Bishop JM. Related Articles, Links

Ras family GTPases control growth of astrocyte processes.
Mol Biol Cell. 1999 May;10(5):1665-83.
PMID: 10233170 [PubMed - indexed for MEDLINE]

139: Galter D, Unsicker K. Related Articles, Links

Regulation of the transmitter phenotype of rostral and caudal groups of cultured serotonergic raphe neurons.
Neuroscience. 1999 Jan;88(2):549-59.
PMID: 10197774 [PubMed - indexed for MEDLINE]

140: Bogler O, Nagane M, Gillis J, Huang HJ, Cavenee WK. Related Articles, Links

Malignant transformation of p53-deficient astrocytes is modulated by environmental cues in vitro.
Cell Growth Differ. 1999 Feb;10(2):73-86.
PMID: 10074901 [PubMed - indexed for MEDLINE]

141: Li L, Ye Z, Zhu J. Related Articles, Links

[Astrogliosis and basic fibroblast growth factor]
Zhonghua Bing Li Xue Za Zhi. 1997 Feb;26(1):8-10. Chinese.
PMID: 10072841 [PubMed - indexed for MEDLINE]

142: Kalyani AJ, Mujtaba T, Rao MS. Related Articles, Links

Expression of EGF receptor and FGF receptor isoforms during neuroepithelial stem cell differentiation.
J Neurobiol. 1999 Feb 5;38(2):207-24.
PMID: 10022567 [PubMed - indexed for MEDLINE]

143: Mi H, Barres BA. Related Articles, Links

Purification and characterization of astrocyte precursor cells in the developing rat optic nerve.
J Neurosci. 1999 Feb 1;19(3):1049-61.
PMID: 9920668 [PubMed - indexed for MEDLINE]

144: Reuss B, Heinke A, Unsicker K. Related Articles, Links

Gap junction uncoupling of neonatal rat astroglial cultures does not affect their expression of fibroblast growth factor 2.
Neurosci Lett. 1998 Dec 11;258(1):45-8.
PMID: 9876048 [PubMed - indexed for MEDLINE]

145: Chandran S, Svendsen C, Compston A, Scolding N. Related Articles, Links

Regional potential for oligodendrocyte generation in the rodent embryonic spinal cord following exposure to EGF and FGF-2.
Glia. 1998 Dec;24(4):382-9.
PMID: 9814818 [PubMed - indexed for MEDLINE]

146: Barnea A, Aguila-Mansilla N, Bigio EH, Worby C, Roberts J. Related Articles, Links

Evidence for regulated expression of neuropeptide Y gene by rat and human cultured astrocytes.
Regul Pept. 1998 Sep 25;75-76:293-300.
PMID: 9802422 [PubMed - indexed for MEDLINE]

147: Flores C, Rodaros D, Stewart J. Related Articles, Links

Long-lasting induction of astrocytic basic fibroblast growth factor by repeated injections of amphetamine: blockade by concurrent treatment with a glutamate antagonist.
J Neurosci. 1998 Nov 15;18(22):9547-55.
PMID: 9801391 [PubMed - indexed for MEDLINE]

148: Treichel JA, Reddington M, Kreutzberg GW. Related Articles, Links

Regulation of plasminogen activator inhibitor-1 mRNA accumulation by basic fibroblast growth factor and transforming growth factor-beta1 in cultured rat astrocytes.
J Neurochem. 1998 Nov;71(5):1944-52.
PMID: 9798919 [PubMed - indexed for MEDLINE]

149: Krieglstein K, Reuss B, Maysinger D, Unsicker K. Related Articles, Links

Short communication: transforming growth factor-beta mediates the neurotrophic effect of fibroblast growth factor-2 on midbrain dopaminergic neurons.
Eur J Neurosci. 1998 Aug;10(8):2746-50.
PMID: 9767406 [PubMed - indexed for MEDLINE]

150: Matsushima K, Schmidt-Kastner R, Hogan MJ, Hakim AM. Related Articles, Links

Cortical spreading depression activates trophic factor expression in neurons and astrocytes and protects against subsequent focal brain ischemia.
Brain Res. 1998 Oct 5;807(1-2):47-60.
PMID: 9756993 [PubMed - indexed for MEDLINE]

151: Kornblum HI, Hussain R, Wiesen J, Miettinen P, Zurcher SD, Chow K, Derynck R, Werb Z. Related Articles, Links

Abnormal astrocyte development and neuronal death in mice lacking the epidermal growth factor receptor.
J Neurosci Res. 1998 Sep 15;53(6):697-717.
PMID: 9753198 [PubMed - indexed for MEDLINE]

152: Fok-Seang J, DiProspero NA, Meiners S, Muir E, Fawcett JW. Related Articles, Links

Cytokine-induced changes in the ability of astrocytes to support migration of oligodendrocyte precursors and axon growth.
Eur J Neurosci. 1998 Jul;10(7):2400-15.
PMID: 9749768 [PubMed - indexed for MEDLINE]

153: Ali SA, Pappas IS, Parnavelas JG. Related Articles, Links

Collagen type IV promotes the differentiation of neuronal progenitors and inhibits astroglial differentiation in cortical cell cultures.
Brain Res Dev Brain Res. 1998 Sep 10;110(1):31-8.
PMID: 9733911 [PubMed - indexed for MEDLINE]

☐ **154:** Moffett J, Kratz E, Myers J, Stachowiak EK, Florkiewicz RZ, Stachowiak MK. Related Articles, Links

Transcriptional regulation of fibroblast growth factor-2 expression in human astrocytes: implications for cell plasticity.
Mol Biol Cell. 1998 Aug;9(8):2269-85.
PMID: 9693381 [PubMed - indexed for MEDLINE]

☐ **155:** Chadi G, Fuxe K. Related Articles, Links

Analysis of trophic responses in lesioned brain: focus on basic fibroblast growth factor mechanisms.
Braz J Med Biol Res. 1998 Feb;31(2):231-41. Review.
PMID: 9686146 [PubMed - indexed for MEDLINE]

☐ **156:** Ben-Hur T, Rogister B, Murray K, Rougon G, Dubois-Dalcq M. Related Articles, Links

Growth and fate of PSA-NCAM+ precursors of the postnatal brain.
J Neurosci. 1998 Aug 1;18(15):5777-88.
PMID: 9671666 [PubMed - indexed for MEDLINE]

☐ **157:** Tryoen-Toth P, Gaveriaux-Ruff C, Maderspach K, Labourdette G. Related Articles, Links

Regulation of kappa-opioid receptor mRNA level by cyclic AMP and growth factors in cultured rat glial cells.
Brain Res Mol Brain Res. 1998 Mar 30;55(1):141-50.
PMID: 9645969 [PubMed - indexed for MEDLINE]

☐ **158:** Riva MA, Molteni R, Racagni G. Related Articles, Links

Differential regulation of FGF-2 and FGFR-1 in rat cortical astrocytes by dexamethasone and isoproterenol.
Brain Res Mol Brain Res. 1998 Jun 1;57(1):38-45.
PMID: 9630502 [PubMed - indexed for MEDLINE]

☐ **159:** Ma W, Liu QY, Maric D, Sathanoori R, Chang YH, Barker JL. Related Articles, Links

Basic FGF-responsive telencephalic precursor cells express functional GABA(A) receptor/Cl-channels in vitro.
J Neurobiol. 1998 Jun;35(3):277-86.
PMID: 9622011 [PubMed - indexed for MEDLINE]

☐ **160:** Gomez-Pinilla F, So V, Kesslak JP. Related Articles, Links

Spatial learning and physical activity contribute to the induction of fibroblast growth factor: neural substrates for increased cognition associated with exercise.
Neuroscience. 1998 Jul;85(1):53-61.
PMID: 9607702 [PubMed - indexed for MEDLINE]

☐ **161:** Deshpande SB, Nishino H. Related Articles, Links

In vitro protection of 3-nitropropionic acid-induced toxicity of astrocytes by basic fibroblast growth factor and thrombin.
Brain Res. 1998 Feb 2;783(1):28-36.
PMID: 9479039 [PubMed - indexed for MEDLINE]

☐ **162:** Sakurai Y, Nishimura D, Yoshimura K, Tsuruo Y, Seiwa C, Asou H. Related Articles, Links

Differentiation of oligodendrocyte occurs in contact with astrocyte.
J Neurosci Res. 1998 Apr 1;52(1):17-26.
PMID: 9556026 [PubMed - indexed for MEDLINE]

☐ **163:** Reilly JF, Maher PA, Kumari VG. Related Articles, Links

Regulation of astrocyte GFAP expression by TGF-beta1 and FGF-2.

Glia. 1998 Feb;22(2):202-10.
PMID: 9537840 [PubMed - indexed for MEDLINE]

164: Krushel LA, Tai MH, Cunningham BA, Edelman GM, Crossin KL. Related Articles, Links

Neural cell adhesion molecule (N-CAM) domains and intracellular signaling pathways involved in the inhibition of astrocyte proliferation.
Proc Natl Acad Sci U S A. 1998 Mar 3;95(5):2592-6.
PMID: 9482931 [PubMed - indexed for MEDLINE]

165: Ling ZD, Potter ED, Lipton JW, Carvey PM. Related Articles, Links

Differentiation of mesencephalic progenitor cells into dopaminergic neurons by cytokines.
Exp Neurol. 1998 Feb;149(2):411-23.
PMID: 9500954 [PubMed - indexed for MEDLINE]

166: Holland EC, Varmus HE. Related Articles, Links

Basic fibroblast growth factor induces cell migration and proliferation after glia-specific gene transfer in mice.
Proc Natl Acad Sci U S A. 1998 Feb 3;95(3):1218-23.
PMID: 9448312 [PubMed - indexed for MEDLINE]

167: Hinkle DA, Harney JP, Cai A, Hilt DC, Yarowsky PJ, Wise PM. Related Articles, Links

Basic fibroblast growth factor-2 and interleukin-1 beta regulate S100 beta expression in cultured astrocytes.
Neuroscience. 1998 Jan;82(1):33-41.
PMID: 9483501 [PubMed - indexed for MEDLINE]

168: Fenton H, Finch PW, Rubin JS, Rosenberg JM, Taylor WG, Kuo-Leblanc V, Rodriguez-Wolf M, Baird A, Schipper HM, Stopa EG. Related Articles, Links

Hepatocyte growth factor (HGF/SF) in Alzheimer's disease.
Brain Res. 1998 Jan 1;779(1-2):262-70.
PMID: 9473690 [PubMed - indexed for MEDLINE]

169: Rowntree S, Kolb B. Related Articles, Links

Blockade of basic fibroblast growth factor retards recovery from motor cortex injury in rats.
Eur J Neurosci. 1997 Nov;9(11):2432-41.
PMID: 9464937 [PubMed - indexed for MEDLINE]

170: Stachowiak MK, Moffett J, Maher P, Tucholski J, Stachowiak EK. Related Articles, Links

Growth factor regulation of cell growth and proliferation in the nervous system. A new intracrine nuclear mechanism.
Mol Neurobiol. 1997 Dec;15(3):257-83. Review.
PMID: 9457702 [PubMed - indexed for MEDLINE]

171: Ohgoh M, Kimura M, Ogura H, Katayama K, Nishizawa Y. Related Articles, Links

Apoptotic cell death of cultured cerebral cortical neurons induced by withdrawal of astroglial trophic support.
Exp Neurol. 1998 Jan;149(1):51-63.
PMID: 9454614 [PubMed - indexed for MEDLINE]

172: Mahler M, Ben-Ari Y, Represa A. Related Articles, Links

Differential expression of fibronectin, tenascin-C and NCAMs in cultured hippocampal astrocytes activated by kainate, bacterial lipopolysaccharide or basic fibroblast growth factor.
Brain Res. 1997 Nov 14;775(1-2):63-73.

PMID: 9439829 [PubMed - indexed for MEDLINE]

☐ **173:** DiProspero NA, Meiners S, Geller HM. Related Articles, Links

Inflammatory cytokines interact to modulate extracellular matrix and astrocytic support of neurite outgrowth.
Exp Neurol. 1997 Dec;148(2):628-39.
PMID: 9417838 [PubMed - indexed for MEDLINE]

☐ **174:** Reuss B, Dermietzel R, Unsicker K. Related Articles, Links

Fibroblast growth factor 2 (FGF-2) differentially regulates connexin (cx) 43 expression and function in astroglial cells from distinct brain regions.
Glia. 1998 Jan;22(1):19-30.
PMID: 9436785 [PubMed - indexed for MEDLINE]

☐ **175:** Niu H, Hinkle DA, Wise PM. Related Articles, Links

Dexamethasone regulates basic fibroblast growth factor, nerve growth factor and S100beta expression in cultured hippocampal astrocytes.
Brain Res Mol Brain Res. 1997 Nov;51(1-2):97-105.
PMID: 9427511 [PubMed - indexed for MEDLINE]

☐ **176:** Smith GM, Hale JH. Related Articles, Links

Macrophage/Microglia regulation of astrocytic tenascin: synergistic action of transforming growth factor-beta and basic fibroblast growth factor.
J Neurosci. 1997 Dec 15;17(24):9624-33.
PMID: 9391017 [PubMed - indexed for MEDLINE]

☐ **177:** Ho A, Blum M. Related Articles, Links

Regulation of astroglial-derived dopaminergic neurotrophic factors by interleukin-1 beta in the striatum of young and middle-aged mice.
Exp Neurol. 1997 Nov;148(1):348-59.
PMID: 9398477 [PubMed - indexed for MEDLINE]

☐ **178:** Svendsen CN, Caldwell MA, Shen J, ter Borg MG, Rosser AE, Tyers P, Karmiol S, Dunnett SB. Related Articles, Links

Long-term survival of human central nervous system progenitor cells transplanted into a rat model of Parkinson's disease.
Exp Neurol. 1997 Nov;148(1):135-46.
PMID: 9398456 [PubMed - indexed for MEDLINE]

☐ **179:** Gomez-Pinilla F, Dao L, So V. Related Articles, Links

Physical exercise induces FGF-2 and its mRNA in the hippocampus.
Brain Res. 1997 Aug 1;764(1-2):1-8.
PMID: 9295187 [PubMed - indexed for MEDLINE]

☐ **180:** Keller JN, Steiner MR, Holtsberg FW, Mattson MP, Steiner SM. Related Articles, Links

Lysophosphatidic acid-induced proliferation-related signals in astrocytes.
J Neurochem. 1997 Sep;69(3):1073-84.
PMID: 9282930 [PubMed - indexed for MEDLINE]

☐ **181:** Bolego C, Ceruti S, Brambilla R, Puglisi L, Cattabeni F, Burnstock G, Abbracchio MP. Related Articles, Links

Characterization of the signalling pathways involved in ATP and basic fibroblast growth factor-induced astrogliosis.
Br J Pharmacol. 1997 Aug;121(8):1692-9.
PMID: 9283705 [PubMed - indexed for MEDLINE]

☐ **182:** Riva MA, Molteni R, Racagni G. Related Articles, Links

L-deprenyl potentiates cAMP-induced elevation of FGF-2 mRNA levels

in rat cortical astrocytes.
Neuroreport. 1997 Jul 7;8(9-10):2165-8.
PMID: 9243604 [PubMed - indexed for MEDLINE]

183: Mahler M, Ferhat L, Ben-Ari Y, Represa A. Related Articles, Links

Effects of tenascin-C in cultured hippocampal astrocytes: NCAM and fibronectin immunoreactivity changes.
Glia. 1997 Jul;20(3):231-42.
PMID: 9215732 [PubMed - indexed for MEDLINE]

184: Reilly JF, Bair L, Kumari V. Related Articles, Links

Heparan sulfate modifies the effects of basic fibroblast growth factor on glial reactivity.
Brain Res. 1997 Jun 13;759(2):277-84.
PMID: 9221948 [PubMed - indexed for MEDLINE]

185: Jacquin-Becker C, Labourdette G. Related Articles, Links

Regulation of aldose reductase expression in rat astrocytes in culture.
Glia. 1997 Jun;20(2):135-44.
PMID: 9179598 [PubMed - indexed for MEDLINE]

186: Asakura K, Hunter SF, Rodriguez M. Related Articles, Links

Effects of transforming growth factor-beta and platelet-derived growth factor on oligodendrocyte precursors: insights gained from a neuronal cell line.
J Neurochem. 1997 Jun;68(6):2281-90.
PMID: 9166720 [PubMed - indexed for MEDLINE]

187: Oh LY, Goodyer CG, Olivier A, Yong VW. Related Articles, Links

The promoting effects of bFGF and astrocyte extracellular matrix on process outgrowth by adult human oligodendrocytes are mediated by protein kinase C.
Brain Res. 1997 May 23;757(2):236-44.
PMID: 9200752 [PubMed - indexed for MEDLINE]

188: Stachowiak EK, Maher PA, Tucholski J, Mordechai E, Joy A, Moffett J, Coons S, Stachowiak MK. Related Articles, Links

Nuclear accumulation of fibroblast growth factor receptors in human glial cells--association with cell proliferation.
Oncogene. 1997 May 8;14(18):2201-11.
PMID: 9174056 [PubMed - indexed for MEDLINE]

189: Baskin F, Smith GM, Fosmire JA, Rosenberg RN. Related Articles, Links

Altered apolipoprotein E secretion in cytokine treated human astrocyte cultures.
J Neurol Sci. 1997 May 1;148(1):15-8.
PMID: 9125385 [PubMed - indexed for MEDLINE]

190: Seidman KJ, Teng AL, Rosenkopf R, Spilotro P, Weyhenmeyer JA. Related Articles, Links

Isolation, cloning and characterization of a putative type-1 astrocyte cell line.
Brain Res. 1997 Apr 4;753(1):18-26.
PMID: 9125427 [PubMed - indexed for MEDLINE]

191: Pappas IS, Parnavelas JG. Related Articles, Links

Neurotrophins and basic fibroblast growth factor induce the differentiation of calbindin-containing neurons in the cerebral cortex.

Exp Neurol. 1997 Apr;144(2):302-14.
PMID: 9168831 [PubMed - indexed for MEDLINE]

☐ **192:** Noel F, Ijichi A, Chen JJ, Gumin GJ, Tofilon PJ. Related Articles, Links

X-ray-mediated reduction in basic fibroblast growth factor expression in primary rat astrocyte cultures.
Radiat Res. 1997 Apr;147(4):484-9.
PMID: 9092929 [PubMed - indexed for MEDLINE]

☐ **193:** Fagan AM, Suhr ST, Lucidi-Phillipi CA, Peterson DA, Holtzman DM, Gage FH. Related Articles, Links

Endogenous FGF-2 is important for cholinergic sprouting in the denervated hippocampus.
J Neurosci. 1997 Apr 1;17(7):2499-511.
PMID: 9065510 [PubMed - indexed for MEDLINE]

☐ **194:** Ballabriga J, Pozas E, Planas AM, Ferrer I. Related Articles, Links

bFGF and FGFR-3 immunoreactivity in the rat brain following systemic kainic acid administration at convulsant doses: localization of bFGF and FGFR-3 in reactive astrocytes, and FGFR-3 in reactive microglia.
Brain Res. 1997 Mar 28;752(1-2):315-8.
PMID: 9106473 [PubMed - indexed for MEDLINE]

☐ **195:** Marchetti B. Related Articles, Links

Cross-talk signals in the CNS: Role of neurotrophic and hormonal factors, adhesion molecules and intercellular signaling agents in luteinizing hormone-releasing hormone (LHRH)-astroglial interactive network
Front Biosci. 1997 Mar 1;2:d88-d125.
PMID: 9159216 [PubMed - as supplied by publisher]

☐ **196:** Cauley K, Kukekov V, Young D. Related Articles, Links

Kainate/AMPA receptors expressed on human fetal astrocytes in long-term culture.
J Neurosci Res. 1997 Feb 1;47(3):311-21.
PMID: 9039653 [PubMed - indexed for MEDLINE]

☐ **197:** Joy A, Moffett J, Neary K, Mordechai E, Stachowiak EK, Coons S, Rankin-Shapiro J, Florkiewicz RZ, Stachowiak MK. Related Articles, Links

Nuclear accumulation of FGF-2 is associated with proliferation of human astrocytes and glioma cells.
Oncogene. 1997 Jan 16;14(2):171-83.
PMID: 9010219 [PubMed - indexed for MEDLINE]

☐ **198:** Franklin RJ, Blakemore WF. Related Articles, Links

Transplanting oligodendrocyte progenitors into the adult CNS.
J Anat. 1997 Jan;190 (Pt 1):23-33. Review.
PMID: 9034879 [PubMed - indexed for MEDLINE]

☐ **199:** Qian X, Davis AA, Goderie SK, Temple S. Related Articles, Links

FGF2 concentration regulates the generation of neurons and glia from multipotent cortical stem cells.
Neuron. 1997 Jan;18(1):81-93.
PMID: 9010207 [PubMed - indexed for MEDLINE]

☐ **200:** Gomez-Pinilla F, Miller S, Choi J, Cotman CW. Related Articles, Links

Heparan sulfate potentiates the autocrine action of basic fibroblast growth factor in astrocytes: an in vivo and in vitro study.
Neuroscience. 1997 Jan;76(1):137-45.

PMID: 8971766 [PubMed - indexed for MEDLINE]

☐ **201:** Rufer M, Wirth SB, Hofer A, Dermietzel R, Pastor A, Kettenmann H, Unsicker K. Related Articles, Links

Regulation of connexin-43, GFAP, and FGF-2 is not accompanied by changes in astroglial coupling in MPTP-lesioned, FGF-2-treated parkinsonian mice.
J Neurosci Res. 1996 Dec 1;46(5):606-17.
PMID: 8951672 [PubMed - indexed for MEDLINE]

☐ **202:** Kurino M, Fukunaga K, Ushio Y, Miyamoto E. Related Articles, Links

Cyclic AMP inhibits activation of mitogen-activated protein kinase and cell proliferation in response to growth factors in cultured rat cortical astrocytes.
J Neurochem. 1996 Dec;67(6):2246-55.
PMID: 8931455 [PubMed - indexed for MEDLINE]

☐ **203:** Bambrick LL, de Grip A, Seenivasan V, Krueger BK, Yarowsky PJ. Related Articles, Links

Expression of glial antigens in mouse astrocytes: species differences and regulation in vitro.
J Neurosci Res. 1996 Nov 1;46(3):305-15.
PMID: 8933369 [PubMed - indexed for MEDLINE]

☐ **204:** Eclancher F, Kehrli P, Labourdette G, Sensenbrenner M. Related Articles, Links

Basic fibroblast growth factor (bFGF) injection activates the glial reaction in the injured adult rat brain.
Brain Res. 1996 Oct 21;737(1-2):201-14.
PMID: 8930367 [PubMed - indexed for MEDLINE]

☐ **205:** Kondo S, Morimura T, Barnett GH, Kondo Y, Peterson JW, Kaakaji R, Takeuchi J, Toms SA, Liu J, Werbel B, Barna BP. Related Articles, Links

The transforming activities of MDM2 in cultured neonatal rat astrocytes.
Oncogene. 1996 Oct 17;13(8):1773-9.
PMID: 8895524 [PubMed - indexed for MEDLINE]

☐ **206:** Suter-Crazzolara C, Unsicker K. Related Articles, Links

GDNF mRNA levels are induced by FGF-2 in rat C6 glioblastoma cells.
Brain Res Mol Brain Res. 1996 Sep 5;41(1-2):175-82.
PMID: 8883950 [PubMed - indexed for MEDLINE]

☐ **207:** Mahler M, Ferhat L, Gillian A, Ben-Ari Y, Represa A. Related Articles, Links

Tenascin-C mRNA and tenascin-C protein immunoreactivity increase in astrocytes after activation by bFGF.
Cell Adhes Commun. 1996 Sep;4(3):175-86.
PMID: 8969863 [PubMed - indexed for MEDLINE]

☐ **208:** Miyake A, Hattori Y, Ohta M, Itoh N. Related Articles, Links

Rat oligodendrocytes and astrocytes preferentially express fibroblast growth factor receptor-2 and -3 mRNAs.
J Neurosci Res. 1996 Sep 1;45(5):534-41.
PMID: 8875318 [PubMed - indexed for MEDLINE]

☐ **209:** Lippoldt A, Andbjer B, Gerst H, Ganten D, Fuxe K. Related Articles, Links

Basic fibroblast growth factor expression and tenascin C immunoreactivity after partial unilateral hemitransection of the rat brain.
Brain Res. 1996 Aug 19;730(1-2):1-16.
PMID: 8883883 [PubMed - indexed for MEDLINE]

☐ **210:** Biesiada E, Razandi M, Levin ER. Related Articles, Links

Egr-1 activates basic fibroblast growth factor transcription. Mechanistic implications for astrocyte proliferation.
J Biol Chem. 1996 Aug 2;271(31):18576-81.
PMID: 8702507 [PubMed - indexed for MEDLINE]

☐ **211:** Reilly JF, Kumari VG. Related Articles, Links

Alterations in fibroblast growth factor receptor expression following brain injury.
Exp Neurol. 1996 Aug;140(2):139-50.
PMID: 8690057 [PubMed - indexed for MEDLINE]

☐ **212:** Oh LY, Yong VW. Related Articles, Links

Astrocytes promote process outgrowth by adult human oligodendrocytes in vitro through interaction between bFGF and astrocyte extracellular matrix.
Glia. 1996 Jul;17(3):237-53.
PMID: 8840165 [PubMed - indexed for MEDLINE]

☐ **213:** Williams TE, Meshul CK, Cherry NJ, Tiffany NM, Eckenstein FP, Woodward WR. Related Articles, Links

Characterization and distribution of basic fibroblast growth factor-containing cells in the rat hippocampus.
J Comp Neurol. 1996 Jun 24;370(2):147-58.
PMID: 8808727 [PubMed - indexed for MEDLINE]

☐ **214:** Kamiguchi H, Yoshida K, Wakamoto H, Inaba M, Sasaki H, Otani M, Toya S. Related Articles, Links

Cytokine-induced selective increase of high-molecular-weight bFGF isoforms and their subcellular kinetics in cultured rat hippocampal astrocytes.
Neurochem Res. 1996 Jun;21(6):701-6.
PMID: 8829143 [PubMed - indexed for MEDLINE]

☐ **215:** el Hafny B, Bourre JM, Roux F. Related Articles, Links

Synergistic stimulation of gamma-glutamyl transpeptidase and alkaline phosphatase activities by retinoic acid and astroglial factors in immortalized rat brain microvessel endothelial cells.
J Cell Physiol. 1996 Jun;167(3):451-60.
PMID: 8655599 [PubMed - indexed for MEDLINE]

☐ **216:** Voigt P, Ma YJ, Gonzalez D, Fahrenbach WH, Wetsel WC, Berg-von der Emde K, Hill DF, Taylor KG, Costa ME, Seidah NG, et al. Related Articles, Links

Neural and glial-mediated effects of growth factors acting via tyrosine kinase receptors on luteinizing hormone-releasing hormone neurons.
Endocrinology. 1996 Jun;137(6):2593-605.
PMID: 8641214 [PubMed - indexed for MEDLINE]

☐ **217:** O'Banion MK, Miller JC, Chang JW, Kaplan MD, Coleman PD. Related Articles, Links

Interleukin-1 beta induces prostaglandin G/H synthase-2 (cyclooxygenase-2) in primary murine astrocyte cultures.
J Neurochem. 1996 Jun;66(6):2532-40.
PMID: 8632179 [PubMed - indexed for MEDLINE]

☐ **218:** Kazazoglou T, Fleischer-Lambropoulos E, Geladopoulos T, Kentroti S, Stefanis C, Vernadakis A. Related Articles, Links

Differential responsiveness of late passage C-6 glial cells and advanced

passages of astrocytes derived from aged mouse cerebral hemispheres to cytokines and growth factors: glutamine synthetase activity.
Neurochem Res. 1996 May;21(5):609-14.
PMID: 8726970 [PubMed - indexed for MEDLINE]

☐ **219:** Canoll PD, Petanceska S, Schlessinger J, Musacchio JM. Related Articles, Links

Three forms of RPTP-beta are differentially expressed during gliogenesis in the developing rat brain and during glial cell differentiation in culture.
J Neurosci Res. 1996 May 1;44(3):199-215.
PMID: 8723759 [PubMed - indexed for MEDLINE]

☐ **220:** Bansal R, Kumar M, Murray K, Pfeiffer SE. Related Articles, Links

Developmental and FGF-2-mediated regulation of syndecans (1-4) and glypican in oligodendrocytes.
Mol Cell Neurosci. 1996 Apr;7(4):276-88.
PMID: 8793863 [PubMed - indexed for MEDLINE]

☐ **221:** Bansal R, Kumar M, Murray K, Morrison RS, Pfeiffer SE. Related Articles, Links

Regulation of FGF receptors in the oligodendrocyte lineage.
Mol Cell Neurosci. 1996 Apr;7(4):263-75.
PMID: 8793862 [PubMed - indexed for MEDLINE]

☐ **222:** Riva MA, Molteni R, Lovati E, Fumagalli F, Rusnati M, Racagni G. Related Articles, Links

Cyclic AMP-dependent regulation of fibroblast growth factor-2 messenger RNA levels in rat cortical astrocytes: comparison with fibroblast growth factor-1 and ciliary neurotrophic factor.
Mol Pharmacol. 1996 Apr;49(4):699-706.
PMID: 8609899 [PubMed - indexed for MEDLINE]

☐ **223:** Moffett J, Kratz E, Florkiewicz R, Stachowiak MK. Related Articles, Links

Promoter regions involved in density-dependent regulation of basic fibroblast growth factor gene expression in human astrocytic cells.
Proc Natl Acad Sci U S A. 1996 Mar 19;93(6):2470-5.
PMID: 8637898 [PubMed - indexed for MEDLINE]

☐ **224:** Nakahara Y, Gage FH, Tuszynski MH. Related Articles, Links

Grafts of fibroblasts genetically modified to secrete NGF, BDNF, NT-3, or basic FGF elicit differential responses in the adult spinal cord.
Cell Transplant. 1996 Mar-Apr;5(2):191-204.
PMID: 8689031 [PubMed - indexed for MEDLINE]

☐ **225:** Chiang YH, Silani V, Zhou FC. Related Articles, Links

Morphological differentiation of astroglial progenitor cells from EGF-responsive neurospheres in response to fetal calf serum, basic fibroblast growth factor, and retinol.
Cell Transplant. 1996 Mar-Apr;5(2):179-89.
PMID: 8689030 [PubMed - indexed for MEDLINE]

☐ **226:** Gehrmann J, Lannes-Vieira J, Wekerle H. Related Articles, Links

Differential expression of fibroblast growth factor-2 and receptor by glial cells in experimental autoimmune encephalomyelitis (EAE)
Glia. 1996 Feb;16(2):93-100. Retraction in: Gehrmann J, Lannes-Vieira J, Wekerle H. Glia. 1997 May;20(1):86.
PMID: 8929896 [PubMed - indexed for MEDLINE]

☐ **227:** Miehe M, Leterrier JF, Deloulme JC, Gensburger C, Knoetgen MF, Sensenbrenner M. Related Articles, Links

Influence of basic fibroblast growth factor and astroglial cells on the ultrastructure of developing rat brain neuronal precursors in vitro.
Dev Neurosci. 1996;18(3):210-23.
PMID: 8894449 [PubMed - indexed for MEDLINE]

228: Engel U, Wolswijk G. Related Articles, Links

Oligodendrocyte-type-2 astrocyte (O-2A) progenitor cells derived from adult rat spinal cord: in vitro characteristics and response to PDGF, bFGF and NT-3.
Glia. 1996 Jan;16(1):16-26.
PMID: 8787770 [PubMed - indexed for MEDLINE]

229: Faber-Elman A, Solomon A, Abraham JA, Marikovsky M, Schwartz M. Related Articles, Links

Involvement of wound-associated factors in rat brain astrocyte migratory response to axonal injury: in vitro simulation.
J Clin Invest. 1996 Jan 1;97(1):162-71.
PMID: 8550829 [PubMed - indexed for MEDLINE]

230: Murphy GM Jr, Lee YL, Jia XC, Yu AC, Majewska A, Song Y, Schmidt K, Eng LF. Related Articles, Links

Tumor necrosis factor-alpha and basic fibroblast growth factor decrease glial fibrillary acidic protein and its encoding mRNA in astrocyte cultures and glioblastoma cells.
J Neurochem. 1995 Dec;65(6):2716-24.
PMID: 7595570 [PubMed - indexed for MEDLINE]

231: Abbracchio MP, Ceruti S, Langfelder R, Cattabeni F, Saffrey MJ, Burnstock G. Related Articles, Links

Effects of ATP analogues and basic fibroblast growth factor on astroglial cell differentiation in primary cultures of rat striatum.
Int J Dev Neurosci. 1995 Nov;13(7):685-93.
PMID: 8787859 [PubMed - indexed for MEDLINE]

232: Williams EJ, Mittal B, Walsh FS, Doherty P. Related Articles, Links

FGF inhibits neurite outgrowth over monolayers of astrocytes and fibroblasts expressing transfected cell adhesion molecules.
J Cell Sci. 1995 Nov;108 (Pt 11):3523-30.
PMID: 8586663 [PubMed - indexed for MEDLINE]

233: Gately S, Soff GA, Brem S. Related Articles, Links

The potential role of basic fibroblast growth factor in the transformation of cultured primary human fetal astrocytes and the proliferation of human glioma (U-87) cells.
Neurosurgery. 1995 Oct;37(4):723-30; discussion 730-2.
PMID: 8559302 [PubMed - indexed for MEDLINE]

234: Yahanda AM, Bruner JM, Donehower LA, Morrison RS. Related Articles, Links

Astrocytes derived from p53-deficient mice provide a multistep in vitro model for development of malignant gliomas.
Mol Cell Biol. 1995 Aug;15(8):4249-59.
PMID: 7623819 [PubMed - indexed for MEDLINE]

235: Laeng P, Bouillon P, Taupenot L, Labourdette G. Related Articles, Links

Long-term induction of an aldose reductase protein by basic fibroblast growth factor in rat astrocytes in vitro.
Electrophoresis. 1995 Jul;16(7):1240-50.
PMID: 7498172 [PubMed - indexed for MEDLINE]

☐ **236:** Riva MA, Fumagalli F, Racagni G. Related Articles, Links

Opposite regulation of basic fibroblast growth factor and nerve growth factor gene expression in rat cortical astrocytes following dexamethasone treatment.
J Neurochem. 1995 Jun;64(6):2526-33.
PMID: 7760032 [PubMed - indexed for MEDLINE]

☐ **237:** Nakafuku M, Nakamura S. Related Articles, Links

Establishment and characterization of a multipotential neural cell line that can conditionally generate neurons, astrocytes, and oligodendrocytes in vitro.
J Neurosci Res. 1995 Jun 1;41(2):153-68.
PMID: 7650751 [PubMed - indexed for MEDLINE]

☐ **238:** Aoyagi A, Saito H, Abe K. Related Articles, Links

Differential effects of microtubule inhibitors on axonal branching and elongation of cultured rat hippocampal neurons.
Jpn J Pharmacol. 1995 Jun;68(2):223-6.
PMID: 7563981 [PubMed - indexed for MEDLINE]

☐ **239:** Kilpatrick TJ, Bartlett PF. Related Articles, Links

Cloned multipotential precursors from the mouse cerebrum require FGF-2, whereas glial restricted precursors are stimulated with either FGF-2 or EGF.
J Neurosci. 1995 May;15(5 Pt 1):3653-61.
PMID: 7751935 [PubMed - indexed for MEDLINE]

☐ **240:** Awatsuji H, Furukawa Y, Hirota M, Furukawa S, Hayashi K. Related Articles, Links

Interferons suppress nerve growth factor synthesis as a result of interference with cell growth in astrocytes cultured from neonatal mouse brain.
J Neurochem. 1995 Apr;64(4):1476-82.
PMID: 7534333 [PubMed - indexed for MEDLINE]

☐ **241:** Neary JT, Jorgensen SL, Oracion AM, Bruce JH, Norenberg MD. Related Articles, Links

Inhibition of growth factor-induced DNA synthesis in astrocytes by ligands of peripheral-type benzodiazepine receptors.
Brain Res. 1995 Mar 27;675(1-2):27-30.
PMID: 7796139 [PubMed - indexed for MEDLINE]

☐ **242:** Gomez-Pinilla F, Vu L, Cotman CW. Related Articles, Links

Regulation of astrocyte proliferation by FGF-2 and heparan sulfate in vivo.
J Neurosci. 1995 Mar;15(3 Pt 1):2021-9.
PMID: 7891149 [PubMed - indexed for MEDLINE]

☐ **243:** Garcia-Segura LM, Canas B, Parducz A, Rougon G, Theodosis D, Naftolin F, Torres-Aleman I. Related Articles, Links

Estradiol promotion of changes in the morphology of astroglia growing in culture depends on the expression of polysialic acid of neural membranes.
Glia. 1995 Mar;13(3):209-16.
PMID: 7782106 [PubMed - indexed for MEDLINE]

☐ **244:** Tournier C, Gavaret JM, Jacquemin C, Pierre M, Saunier B. Related Articles, Links

Stimulation of mitogen-activated protein kinase by thyrotropin in astrocytes.
Eur J Biochem. 1995 Feb 15;228(1):16-22.

PMID: 7882998 [PubMed - indexed for MEDLINE]

☐ **245:** Hou YJ, Yu AC, Garcia JM, Aotaki-Keen A, Lee YL, Eng LF, Hjelmeland LJ, Menon VK. Related Articles, Links

Astrogliosis in culture. IV. Effects of basic fibroblast growth factor.
J Neurosci Res. 1995 Feb 15;40(3):359-70.
PMID: 7745630 [PubMed - indexed for MEDLINE]

☐ **246:** Guthrie KM, Nguyen T, Gall CM. Related Articles, Links

Insulin-like growth factor-1 mRNA is increased in deafferented hippocampus: spatiotemporal correspondence of a trophic event with axon sprouting.
J Comp Neurol. 1995 Jan 30;352(1):147-60.
PMID: 7714238 [PubMed - indexed for MEDLINE]

☐ **247:** Kataoka H, Yamada E, Hayase Y, Hazama F. Related Articles, Links

Increased immunoreactivities for the basic fibroblast growth factor and its receptor in astrocytes at the site of cerebral lesions and oedematous change in SHR.
Clin Exp Pharmacol Physiol Suppl. 1995 Dec;22(1):S262-4.
PMID: 9072383 [PubMed - indexed for MEDLINE]

☐ **248:** Hulley P, Hartikka J, Lubbert H. Related Articles, Links

Cyclic AMP promotes the survival of dopaminergic neurons in vitro and protects them from the toxic effects of MPP+.
J Neural Transm Suppl. 1995;46:217-28.
PMID: 8821058 [PubMed - indexed for MEDLINE]

☐ **249:** Gallo V, Armstrong RC. Related Articles, Links

Developmental and growth factor-induced regulation of nestin in oligodendrocyte lineage cells.
J Neurosci. 1995 Jan;15(1 Pt 1):394-406.
PMID: 7823144 [PubMed - indexed for MEDLINE]

☐ **250:** Vergeli M, mazzanti B, Ballerini C, Gran B, Amaducci L, Massacesi L Related Articles, Links

Transforming growth factor-beta 1 inhibits the proliferation of rat astrocytes induced by serum and growth factors.
J Neurosci Res. 1995 Jan 1;40(1):127-33.
PMID: 7714920 [PubMed - indexed for MEDLINE]

☐ **251:** Yin QW, Johnson J, Prevette D, Oppenheim RW. Related Articles, Links

Cell death of spinal motoneurons in the chick embryo following deafferentation: rescue effects of tissue extracts, soluble proteins, and neurotrophic agents.
J Neurosci. 1994 Dec;14(12):7629-40.
PMID: 7996201 [PubMed - indexed for MEDLINE]

☐ **252:** Canonne-Hergaux F, Zwiller J, Aunis D. Related Articles, Links

cAMP and bFGF negatively regulate tropomyosin expression in rat cultured astroblasts.
Neurochem Int. 1994 Dec;25(6):545-53.
PMID: 7894331 [PubMed - indexed for MEDLINE]

☐ **253:** Castelnau P, Lazarini F, Deslys JP, Dormont D. Related Articles, Links

Prion protein gene expression in cultured astrocytes treated by recombinant growth hormone and insulin-like growth factor.
Exp Neurol. 1994 Dec;130(2):407-10.

PMID: 7867769 [PubMed - indexed for MEDLINE]

☐ **254:** Zajicek J, Compston A. Related Articles, Links

Myelination in vitro of rodent dorsal root ganglia by glial progenitor cells.
Brain. 1994 Dec;117 (Pt 6):1333-50.
PMID: 7820570 [PubMed - indexed for MEDLINE]

☐ **255:** Czubayko F, Smith RV, Chung HC, Wellstein A. Related Articles, Links

Tumor growth and angiogenesis induced by a secreted binding protein for fibroblast growth factors.
J Biol Chem. 1994 Nov 11;269(45):28243-8.
PMID: 7525570 [PubMed - indexed for MEDLINE]

☐ **256:** Pike CJ, Cummings BJ, Monzavi R, Cotman CW. Related Articles, Links

Beta-amyloid-induced changes in cultured astrocytes parallel reactive astrocytosis associated with senile plaques in Alzheimer's disease.
Neuroscience. 1994 Nov;63(2):517-31.
PMID: 7891862 [PubMed - indexed for MEDLINE]

☐ **257:** Miyagawa T, Saito H. Related Articles, Links

[Experimental techniques for developing new drugs acting on dementia (5)--Screening method in drug evaluation on neurite regeneration in primary cultured neurons]
Yakubutsu Seishin Kodo. 1994 Oct;14(5):299-303. Japanese.
PMID: 7856326 [PubMed - indexed for MEDLINE]

☐ **258:** Menon VK, Landerholm TE. Related Articles, Links

Intralesion injection of basic fibroblast growth factor alters glial reactivity to neural trauma.
Exp Neurol. 1994 Sep;129(1):142-54.
PMID: 7925836 [PubMed - indexed for MEDLINE]

☐ **259:** Gomez-Pinilla F, Lee JW, Cotman CW. Related Articles, Links

Distribution of basic fibroblast growth factor in the developing rat brain.
Neuroscience. 1994 Aug;61(4):911-23.
PMID: 7838387 [PubMed - indexed for MEDLINE]

☐ **260:** Chadi G, Cao Y, Pettersson RF, Fuxe K. Related Articles, Links

Temporal and spatial increase of astroglial basic fibroblast growth factor synthesis after 6-hydroxydopamine-induced degeneration of the nigrostriatal dopamine neurons.
Neuroscience. 1994 Aug;61(4):891-910.
PMID: 7838386 [PubMed - indexed for MEDLINE]

☐ **261:** Chen HH, Chien CH, Liu HM. Related Articles, Links

Correlation between angiogenesis and basic fibroblast growth factor expression in experimental brain infarct.
Stroke. 1994 Aug;25(8):1651-7.
PMID: 7518971 [PubMed - indexed for MEDLINE]

☐ **262:** Neary JT, Whittemore SR, Zhu Q, Norenberg MD. Related Articles, Links

Synergistic activation of DNA synthesis in astrocytes by fibroblast growth factors and extracellular ATP.
J Neurochem. 1994 Aug;63(2):490-4.
PMID: 7518498 [PubMed - indexed for MEDLINE]

☐ **263:** Scherer J, Schnitzer J. Related Articles, Links

Growth factor effects on the proliferation of different retinal glial cells in vitro.
Brain Res Dev Brain Res. 1994 Jul 15;80(1-2):209-21.
PMID: 7525114 [PubMed - indexed for MEDLINE]

264: Cintra A, Lindberg J, Chadi G, Tinner B, Moller A, Gustafsson JA, DeKloet ER, Oitzl M, Nishikawa K, Agnati LF, et al. Related Articles, Links

Basic fibroblast growth factor and steroid receptors in the aging hippocampus of the brown Norway rat: immunocytochemical analysis in combination with stereology.
Neurochem Int. 1994 Jul;25(1):39-45.
PMID: 7950968 [PubMed - indexed for MEDLINE]

265: Biagini G, Frasoldati A, Fuxe K, Agnati LF. Related Articles, Links

The concept of astrocyte-kinetic drug in the treatment of neurodegenerative diseases: evidence for L-deprenyl-induced activation of reactive astrocytes.
Neurochem Int. 1994 Jul;25(1):17-22.
PMID: 7950964 [PubMed - indexed for MEDLINE]

266: Pomerance M, Gavaret JM, Breton M, Pierre M. Related Articles, Links

Growth factor-regulated phosphatidylinositol-3-kinase in astrocytes. Involvement of pp60c-src.
Cell Mol Biol (Noisy-le-grand). 1994 Jul;40(5):653-64.
PMID: 7526918 [PubMed - indexed for MEDLINE]

267: Khan S, Wigley C. Related Articles, Links

Different effects of a macrophage cytokine on proliferation in astrocytes and Schwann cells.
Neuroreport. 1994 Jun 27;5(11):1381-5.
PMID: 7919205 [PubMed - indexed for MEDLINE]

268: Casper D, Roboz GJ, Blum M. Related Articles, Links

Epidermal growth factor and basic fibroblast growth factor have independent actions on mesencephalic dopamine neurons in culture.
J Neurochem. 1994 Jun;62(6):2166-77.
PMID: 8189225 [PubMed - indexed for MEDLINE]

269: Fressinaud C, Vallat JM. Related Articles, Links

Basic fibroblast growth factor improves recovery after chemically induced breakdown of myelin-like membranes in pure oligodendrocyte cultures.
J Neurosci Res. 1994 Jun 1;38(2):202-13.
PMID: 8078105 [PubMed - indexed for MEDLINE]

270: O'Malley EK, Sieber BA, Morrison RS, Black IB, Dreyfus CF. Related Articles, Links

Nigral type I astrocytes release a soluble factor that increases dopaminergic neuron survival through mechanisms distinct from basic fibroblast growth factor.
Brain Res. 1994 May 30;647(1):83-90.
PMID: 8069707 [PubMed - indexed for MEDLINE]

271: Rudge JS, Li Y, Pasnikowski EM, Mattsson K, Pan L, Yancopoulos GD, Wiegand SJ, Lindsay RM, Ip NY. Related Articles, Links

Neurotrophic factor receptors and their signal transduction capabilities in rat astrocytes.
Eur J Neurosci. 1994 May 1;6(5):693-705.
PMID: 8075814 [PubMed - indexed for MEDLINE]

272: Van Der Wal EA, Gomez-Pinilla F, Cotman CW. Related Articles, Links

Seizure-associated induction of basic fibroblast growth factor and its receptor in the rat brain.
Neuroscience. 1994 May;60(2):311-23.
PMID: 8072686 [PubMed - indexed for MEDLINE]

273: Hu RM, Levin ER. Related Articles, Links

Astrocyte growth is regulated by neuropeptides through Tis 8 and basic fibroblast growth factor.
J Clin Invest. 1994 Apr;93(4):1820-7.
PMID: 8163680 [PubMed - indexed for MEDLINE]

274: Bogler O, Noble M. Related Articles, Links

Measurement of time in oligodendrocyte-type-2 astrocyte (O-2A) progenitors is a cellular process distinct from differentiation or division.
Dev Biol. 1994 Apr;162(2):525-38.
PMID: 8150211 [PubMed - indexed for MEDLINE]

275: Roux F, Durieu-Trautmann O, Chaverot N, Claire M, Mailly P, Bourre JM, Strosberg AD, Couraud PO. Related Articles, Links

Regulation of gamma-glutamyl transpeptidase and alkaline phosphatase activities in immortalized rat brain microvessel endothelial cells.
J Cell Physiol. 1994 Apr;159(1):101-13.
PMID: 7908023 [PubMed - indexed for MEDLINE]

276: Lazarini F, Castelnau P, Chermann JF, Deslys JP, Dormont D. Related Articles, Links

Modulation of prion protein gene expression by growth factors in cultured mouse astrocytes and PC-12 cells.
Brain Res Mol Brain Res. 1994 Mar;22(1-4):268-74.
PMID: 7912403 [PubMed - indexed for MEDLINE]

277: Liu HM, Chen HH. Related Articles, Links

Correlation between fibroblast growth factor expression and cell proliferation in experimental brain infarct: studied with proliferating cell nuclear antigen immunohistochemistry.
J Neuropathol Exp Neurol. 1994 Mar;53(2):118-26.
PMID: 7509846 [PubMed - indexed for MEDLINE]

278: Fuxe K, Chadi G, Tinner B, Agnati LF, Pettersson R, David G. Related Articles, Links

On the regional distribution of heparan sulfate proteoglycan immunoreactivity in the rat brain.
Brain Res. 1994 Feb 4;636(1):131-8.
PMID: 7512431 [PubMed - indexed for MEDLINE]

279: Rudge JS, Morrissey D, Lindsay RM, Pasnikowski EM. Related Articles, Links

Regulation of ciliary neurotrophic factor in cultured rat hippocampal astrocytes.
Eur J Neurosci. 1994 Feb 1;6(2):218-29.
PMID: 8167843 [PubMed - indexed for MEDLINE]

280: Fok-Seang J, Miller RH. Related Articles, Links

Distribution and differentiation of A2B5+ glial precursors in the developing rat spinal cord.
J Neurosci Res. 1994 Feb 1;37(2):219-35.
PMID: 8151730 [PubMed - indexed for MEDLINE]

281: Takeshima T, Johnston JM, Commissiong JW. Related Articles, Links

Oligodendrocyte-type-2 astrocyte (O-2A) progenitors increase the survival of rat mesencephalic, dopaminergic neurons from death induced by serum deprivation.
Neurosci Lett. 1994 Jan 31;166(2):178-82.
PMID: 7909926 [PubMed - indexed for MEDLINE]

282: Humpel C, Chadi G, Lippoldt A, Ganten D, Fuxe K, Olson L. Related Articles, Links

Increase of basic fibroblast growth factor (bFGF, FGF-2) messenger RNA and protein following implantation of a microdialysis probe into rat hippocampus.
Exp Brain Res. 1994;98(2):229-37.
PMID: 8050509 [PubMed - indexed for MEDLINE]

283: Noble M. Related Articles, Links

The O-2A lineage: from rats to humans.
Recent Results Cancer Res. 1994;135:67-75. Review. No abstract available.
PMID: 8047698 [PubMed - indexed for MEDLINE]

284: Yamada E, Kataoka H, Chue CH, Hazama F. Related Articles, Links

Expression of basic fibroblast growth factor in astrocytes at the site of cerebral lesions and edematous areas under chronic hypertension.
Acta Neurochir Suppl (Wien). 1994;60:265-7.
PMID: 7976562 [PubMed - indexed for MEDLINE]

285: Morrison RS, Yamaguchi F, Saya H, Bruner JM, Yahanda AM, Donehower LA, Berger M. Related Articles, Links

Basic fibroblast growth factor and fibroblast growth factor receptor I are implicated in the growth of human astrocytomas.
J Neurooncol. 1994;18(3):207-16. Review.
PMID: 7964981 [PubMed - indexed for MEDLINE]

286: Kataoka H, Yamada E, Hazama F. Related Articles, Links

Increased basic fibroblast growth factor immunoreactivity in the brain of stroke-prone spontaneously hypertensive rats.
Acta Neuropathol (Berl). 1994;88(1):7-13.
PMID: 7941975 [PubMed - indexed for MEDLINE]

287: Eckenstein FP, Andersson C, Kuzis K, Woodward WR. Related Articles, Links

Distribution of acidic and basic fibroblast growth factors in the mature, injured and developing rat nervous system.
Prog Brain Res. 1994;103:55-64. Review. No abstract available.
PMID: 7533916 [PubMed - indexed for MEDLINE]

288: Powell PP, Klagsbrun M. Related Articles, Links

Regulation of basic fibroblast growth factor mRNA expression in rat C6 glioma cells.
Exp Cell Res. 1993 Dec;209(2):224-30.
PMID: 8262139 [PubMed - indexed for MEDLINE]

289: Meiners S, Marone M, Rittenhouse JL, Geller HM. Related Articles, Links

Regulation of astrocytic tenascin by basic fibroblast growth factor.
Dev Biol. 1993 Dec;160(2):480-93.
PMID: 7504635 [PubMed - indexed for MEDLINE]

290: Yoshida T, Satoh M, Nakagaito Y, Kuno H, Takeuchi M. Related Articles, Links

Cytokines affecting survival and differentiation of an astrocyte progenitor cell line.
Brain Res Dev Brain Res. 1993 Nov 19;76(1):147-50.

PMID: 8306427 [PubMed - indexed for MEDLINE]

291: Vescovi AL, Reynolds BA, Fraser DD, Weiss S. Related Articles, Links

bFGF regulates the proliferative fate of unipotent (neuronal) and bipotent (neuronal/astroglial) EGF-generated CNS progenitor cells.
Neuron. 1993 Nov;11(5):951-66.
PMID: 8240816 [PubMed - indexed for MEDLINE]

292: Bradshaw SL, Han VK. Related Articles, Links

Growth factors modulate the biosynthesis of rat astroglial insulin-like growth factor binding proteins.
Ann N Y Acad Sci. 1993 Aug 27;692:249-52. No abstract available.
PMID: 7692790 [PubMed - indexed for MEDLINE]

293: Avola R, Ragusa N, Reale S, Costa A, Insirello L, Giuffrida Stella AM. Related Articles, Links

Effect of growth factors on macromolecular synthesis in primary rat astroglial cell cultures.
Ann N Y Acad Sci. 1993 Aug 27;692:192-200. No abstract available.
PMID: 7692786 [PubMed - indexed for MEDLINE]

294: Zhou D, DiFiglia M. Related Articles, Links

Basic fibroblast growth factor enhances the growth of postnatal neostriatal GABAergic neurons in vitro.
Exp Neurol. 1993 Aug;122(2):171-88.
PMID: 8405257 [PubMed - indexed for MEDLINE]

295: Fressinaud C, Laeng P, Labourdette G, Durand J, Vallat JM. Related Articles, Links

The proliferation of mature oligodendrocytes in vitro is stimulated by basic fibroblast growth factor and inhibited by oligodendrocyte-type 2 astrocyte precursors.
Dev Biol. 1993 Aug;158(2):317-29.
PMID: 8344453 [PubMed - indexed for MEDLINE]

296: McKinnon RD, Piras G, Ida JA Jr, Dubois-Dalcq M. Related Articles, Links

A role for TGF-beta in oligodendrocyte differentiation.
J Cell Biol. 1993 Jun;121(6):1397-407.
PMID: 8509457 [PubMed - indexed for MEDLINE]

297: Nagano N, Aoyagi M, Hirakawa K. Related Articles, Links

Extracellular matrix modulates the proliferation of rat astrocytes in serum-free culture.
Glia. 1993 Jun;8(2):71-6.
PMID: 8406675 [PubMed - indexed for MEDLINE]

298: Gray CW, Patel AJ. Related Articles, Links

Induction of beta-amyloid precursor protein isoform mRNAs by bFGF in astrocytes.
Neuroreport. 1993 Jun;4(6):811-4.
PMID: 8347831 [PubMed - indexed for MEDLINE]

299: Neuberger TJ, De Vries GH. Related Articles, Links

Distribution of fibroblast growth factor in cultured dorsal root ganglion neurons and Schwann cells. II. Redistribution after neural injury.
J Neurocytol. 1993 Jun;22(6):449-60.
PMID: 7688414 [PubMed - indexed for MEDLINE]

300: Mayer M, Bogler O, Noble M. Related Articles, Links

The inhibition of oligodendrocytic differentiation of O-2A progenitors caused by basic fibroblast growth factor is overridden by astrocytes.
Glia. 1993 May;8(1):12-9.
PMID: 8509161 [PubMed - indexed for MEDLINE]

301: Imaizumi K, Iwata H, Yoshida S, Sun G, Okumura N, Shiosaka S. Related Articles, Links

Coexistence of amyloid beta-protein precursor and basic fibroblast growth factor in single cells of the rat parietal cortex, hippocampus and basal magnocellular nucleus.
J Chem Neuroanat. 1993 May-Jun;6(3):159-65.
PMID: 8343215 [PubMed - indexed for MEDLINE]

302: Pechan PA, Chowdhury K, Gerdes W, Seifert W. Related Articles, Links

Glutamate induces the growth factors NGF, bFGF, the receptor FGF-R1 and c-fos mRNA expression in rat astrocyte culture.
Neurosci Lett. 1993 Apr 16;153(1):111-4.
PMID: 8099723 [PubMed - indexed for MEDLINE]

303: Morrison RS, Giordano S, Yamaguchi F, Hendrickson S, Berger MS, Palczewski K. Related Articles, Links

Basic fibroblast growth factor expression is required for clonogenic growth of human glioma cells.
J Neurosci Res. 1993 Apr 1;34(5):502-9.
PMID: 8478985 [PubMed - indexed for MEDLINE]

304: Groves AK, Barnett SC, Franklin RJ, Crang AJ, Mayer M, Blakemore WF, Noble M. Related Articles, Links

Repair of demyelinated lesions by transplantation of purified O-2A progenitor cells.
Nature. 1993 Apr 1;362(6419):453-5.
PMID: 8464477 [PubMed - indexed for MEDLINE]

305: Vijayan VK, Lee YL, Eng LF. Related Articles, Links

Immunohistochemical localization of basic fibroblast growth factor in cultured rat astrocytes and oligodendrocytes.
Int J Dev Neurosci. 1993 Apr;11(2):257-67.
PMID: 8392278 [PubMed - indexed for MEDLINE]

306: Matsuda S, Fujita H, Imaoka S, Okumura N, Sakanaka M. Related Articles, Links

Immunoelectron microscopic localization of basic FGF in neuroglias and neurons of the trigeminal mesencephalic and motor nuclei.
Okajimas Folia Anat Jpn. 1993 Mar;69(6):335-43.
PMID: 8469523 [PubMed - indexed for MEDLINE]

307: Hunter KE, Sporn MB, Davies AM. Related Articles, Links

Transforming growth factor-betas inhibit mitogen-stimulated proliferation of astrocytes.
Glia. 1993 Mar;7(3):203-11.
PMID: 8454307 [PubMed - indexed for MEDLINE]

308: Otto D, Unsicker K. Related Articles, Links

FGF-2-mediated protection of cultured mesencephalic dopaminergic neurons against MPTP and MPP+: specificity and impact of culture conditions, non-dopaminergic neurons, and astroglial cells.
J Neurosci Res. 1993 Mar 1;34(4):382-93.
PMID: 8097265 [PubMed - indexed for MEDLINE]

309: Koshinaga M, Sanon HR, Whittemore SR. Related Articles, Links

Altered acidic and basic fibroblast growth factor expression following spinal cord injury.
Exp Neurol. 1993 Mar;120(1):32-48.
PMID: 7682969 [PubMed - indexed for MEDLINE]

310: Chernausek SD. Related Articles, Links

Insulin-like growth factor-I (IGF-I) production by astroglial cells: regulation and importance for epidermal growth factor-induced cell replication.
J Neurosci Res. 1993 Feb 1;34(2):189-97.
PMID: 8450562 [PubMed - indexed for MEDLINE]

311: Pilkington GJ, Dunan JR, Rogers JP, Clarke TM, Knott JC. Related Articles, Links

Growth factor modulation of surface ganglioside expression in cloned neoplastic glia.
Neurosci Lett. 1993 Jan 4;149(1):1-5.
PMID: 8469369 [PubMed - indexed for MEDLINE]

312: Flott-Rahmel B, Gerdes W, Pechan PA, Brysch W, Schlingensiepen KH, Seifert W. Related Articles, Links

bFGF induces its own gene expression in astrocytic and hippocampal cell cultures.
Neuroreport. 1992 Dec;3(12):1077-80.
PMID: 1493220 [PubMed - indexed for MEDLINE]

313: Noble M, Wren D, Wolswijk G. Related Articles, Links

The O-2A(adult) progenitor cell: a glial stem cell of the adult central nervous system.
Semin Cell Biol. 1992 Dec;3(6):413-22. Review.
PMID: 1489973 [PubMed - indexed for MEDLINE]

314: Delree P, Martin D, Sadzot-Delvaux C, Rogister B, Leprince P, Robe P, Rigo JM, Lefebvre PP, Malgrange B, Schoenen J, et al. Related Articles, Links

In vitro and in vivo modulation of 5-hydroxytryptamine-, thyrotropin-releasing hormone- and calcitonin-gene related peptide-like immunoreactivities in adult rat sensory neurons.
Neuroscience. 1992 Nov;51(2):401-10.
PMID: 1465199 [PubMed - indexed for MEDLINE]

315: Korr H, Siewert E, Bertram C, Labourdette G, Sensenbrenner M. Related Articles, Links

Autoradiographic studies of rat astroglial cell proliferation in vitro with and without treatment with basic fibroblast growth factor.
Cell Prolif. 1992 Nov;25(6):605-22.
PMID: 1457608 [PubMed - indexed for MEDLINE]

316: Yamashita N, Nishiyama N, Abe K, Saito H, Fukuda J. Related Articles, Links

Primary culture of postnatal rat hypothalamic neurons in astrocyte-conditioned medium.
Brain Res. 1992 Oct 30;594(2):215-20.
PMID: 1450947 [PubMed - indexed for MEDLINE]

317: Unsicker K, Engels S, Hamm C, Ludecke G, Meier C, Renzing J, Terbrack HG, Flanders K. Related Articles, Links

Molecular control of neural plasticity by the multifunctional growth factor families of the FGFs and TGF-beta s.
Anat Anz. 1992 Oct;174(5):405-7. Review. No abstract available.
PMID: 1449217 [PubMed - indexed for MEDLINE]

318: Crang AJ, Franklin RJ, Blakemore WF, Noble M, Barnett SC. Related Articles, Links

Groves A, Trotter J, Schachner M.

The differentiation of glial cell progenitor populations following transplantation into non-repairing central nervous system glial lesions in adult animals.
J Neuroimmunol. 1992 Oct;40(2-3):243-53.
PMID: 1430154 [PubMed - indexed for MEDLINE]

319: Richards LJ, Kilpatrick TJ, Bartlett PF. Related Articles, Links

De novo generation of neuronal cells from the adult mouse brain.
Proc Natl Acad Sci U S A. 1992 Sep 15;89(18):8591-5.
PMID: 1528866 [PubMed - indexed for MEDLINE]

320: Yoshida K, Kakihana M, Chen LS, Ong M, Baird A, Gage FH. Related Articles, Links

Cytokine regulation of nerve growth factor-mediated cholinergic neurotrophic activity synthesized by astrocytes and fibroblasts.
J Neurochem. 1992 Sep;59(3):919-31.
PMID: 1494917 [PubMed - indexed for MEDLINE]

321: Chabert MG, Niedergang CP, Hog F, Partisani M, Mandel P. Related Articles, Links

Poly(ADPR)polymerase expression and activity during proliferation and differentiation of rat astrocyte and neuronal cultures.
Biochim Biophys Acta. 1992 Aug 12;1136(2):196-202.
PMID: 1504104 [PubMed - indexed for MEDLINE]

322: Engele J, Bohn MC. Related Articles, Links

Effects of acidic and basic fibroblast growth factors (aFGF, bFGF) on glial precursor cell proliferation: age dependency and brain region specificity.
Dev Biol. 1992 Aug;152(2):363-72.
PMID: 1379560 [PubMed - indexed for MEDLINE]

323: Wolswijk G, Noble M. Related Articles, Links

Cooperation between PDGF and FGF converts slowly dividing O-2Aadult progenitor cells to rapidly dividing cells with characteristics of O-2Aperinatal progenitor cells.
J Cell Biol. 1992 Aug;118(4):889-900.
PMID: 1323567 [PubMed - indexed for MEDLINE]

324: Gaul G, Lubbert H. Related Articles, Links

Cortical astrocytes activated by basic fibroblast growth factor secrete molecules that stimulate differentiation of mesencephalic dopaminergic neurons.
Proc R Soc Lond B Biol Sci. 1992 Jul 22;249(1324):57-63.
PMID: 1279704 [PubMed - indexed for MEDLINE]

325: Dix RD, Hurst L, Keane RW. Related Articles, Links

Herpes simplex virus type 1 infection of mouse astrocytes treated with basic fibroblast growth factor.
J Gen Virol. 1992 Jul;73 (Pt 7):1845-8.
PMID: 1321218 [PubMed - indexed for MEDLINE]

326: Pechan PA, Chowdhury K, Seifert W. Related Articles, Links

Free radicals induce gene expression of NGF and bFGF in rat astrocyte culture.
Neuroreport. 1992 Jun;3(6):469-72.
PMID: 1391749 [PubMed - indexed for MEDLINE]

327: Araujo DM, Cotman CW. Related Articles, Links

Basic FGF in astroglial, microglial, and neuronal cultures: characterization of binding sites and modulation of release by lymphokines and trophic factors.
J Neurosci. 1992 May;12(5):1668-78.
PMID: 1578261 [PubMed - indexed for MEDLINE]

328: Armstrong RC, Dorn HH, Kufta CV, Friedman E, Dubois-Dalcq ME. Related Articles, Links

Pre-oligodendrocytes from adult human CNS.
J Neurosci. 1992 Apr;12(4):1538-47.
PMID: 1556607 [PubMed - indexed for MEDLINE]

329: Gray CW, Patel AJ. Related Articles, Links

Characterization of a neurotrophic factor produced by cultured astrocytes involved in the regulation of subcortical cholinergic neurons.
Brain Res. 1992 Mar 6;574(1-2):257-65.
PMID: 1638399 [PubMed - indexed for MEDLINE]

330: Araujo DM, Cotman CW. Related Articles, Links

Beta-amyloid stimulates glial cells in vitro to produce growth factors that accumulate in senile plaques in Alzheimer's disease.
Brain Res. 1992 Jan 8;569(1):141-5.
PMID: 1611474 [PubMed - indexed for MEDLINE]

331: Yoshida K, Gage FH. Related Articles, Links

Cooperative regulation of nerve growth factor synthesis and secretion in fibroblasts and astrocytes by fibroblast growth factor and other cytokines.
Brain Res. 1992 Jan 8;569(1):14-25.
PMID: 1377078 [PubMed - indexed for MEDLINE]

332: Woodward WR, Nishi R, Meshul CK, Williams TE, Coulombe M, Eckenstein FP. Related Articles, Links

Nuclear and cytoplasmic localization of basic fibroblast growth factor in astrocytes and CA2 hippocampal neurons.
J Neurosci. 1992 Jan;12(1):142-52.
PMID: 1729432 [PubMed - indexed for MEDLINE]

333: Louis JC, Magal E, Muir D, Manthorpe M, Varon S. Related Articles, Links

CG-4, a new bipotential glial cell line from rat brain, is capable of differentiating in vitro into either mature oligodendrocytes or type-2 astrocytes.
J Neurosci Res. 1992 Jan;31(1):193-204.
PMID: 1613821 [PubMed - indexed for MEDLINE]

334: Gerdes W, Brysch W, Schlingensiepen KH, Seifert W. Related Articles, Links

Antisense bFGF oligodeoxynucleotides inhibit DNA synthesis of rat astrocytes.
Neuroreport. 1992 Jan;3(1):43-6.
PMID: 1611034 [PubMed - indexed for MEDLINE]

335: Gomez-Pinilla F, Lee JW, Cotman CW. Related Articles, Links

Basic FGF in adult rat brain: cellular distribution and response to entorhinal lesion and fimbria-fornix transection.
J Neurosci. 1992 Jan;12(1):345-55.
PMID: 1309575 [PubMed - indexed for MEDLINE]

336: Lefebvre PP, Van de Water TR, Weber T, Rogister B, Moonen G. Related Articles, Links

Growth factor interactions in cultures of dissociated adult acoustic ganglia: neuronotrophic effects.
Brain Res. 1991 Dec 20;567(2):306-12.
PMID: 1817733 [PubMed - indexed for MEDLINE]

337: Fressinaud C, Weinrauder H, Delaunoy JP, Tholey G, Labourdette G, Sarlieve LL. Related Articles, Links

Glutamine synthetase expression in rat oligodendrocytes in culture: regulation by hormones and growth factors.
J Cell Physiol. 1991 Dec;149(3):459-68.
PMID: 1683875 [PubMed - indexed for MEDLINE]

338: Saad B, Constam DB, Ortmann R, Moos M, Fontana A, Schachner M. Related Articles, Links

Astrocyte-derived TGF-beta 2 and NGF differentially regulate neural recognition molecule expression by cultured astrocytes.
J Cell Biol. 1991 Oct;115(2):473-84.
PMID: 1717486 [PubMed - indexed for MEDLINE]

339: Petroski RE, Grierson JP, Choi-Kwon S, Geller HM. Related Articles, Links

Basic fibroblast growth factor regulates the ability of astrocytes to support hypothalamic neuronal survival in vitro.
Dev Biol. 1991 Sep;147(1):1-13.
PMID: 1879603 [PubMed - indexed for MEDLINE]

340: Pasick JM, Dales S. Related Articles, Links

Infection by coronavirus JHM of rat neurons and oligodendrocyte-type-2 astrocyte lineage cells during distinct developmental stages.
J Virol. 1991 Sep;65(9):5013-28.
PMID: 1651420 [PubMed - indexed for MEDLINE]

341: Vige X, Costa E, Wise BC. Related Articles, Links

Mechanism of nerve growth factor mRNA regulation by interleukin-1 and basic fibroblast growth factor in primary cultures of rat astrocytes.
Mol Pharmacol. 1991 Aug;40(2):186-92.
PMID: 1875907 [PubMed - indexed for MEDLINE]

342: Sweetnam PM, Sanon HR, White LA, Brass BJ, Jaye M, Whittemore SR Related Articles, Links

Differential effects of acidic and basic fibroblast growth factors on spinal cord cholinergic, GABAergic, and glutamatergic neurons.
J Neurochem. 1991 Jul;57(1):237-49.
PMID: 1711096 [PubMed - indexed for MEDLINE]

343: Walicke PA, Baird A. Related Articles, Links

Internalization and processing of basic fibroblast growth factor by neurons and astrocytes.
J Neurosci. 1991 Jul;11(7):2249-58.
PMID: 1648607 [PubMed - indexed for MEDLINE]

344: Alterman RL, Morrison RS, Goodrich JT, Papenhausen P, Moskal JR. Related Articles, Links

A primary encephalocele culture yields a pure population of human astrocytes.
Brain Res. 1991 Jun 7;550(2):319-23.
PMID: 1884239 [PubMed - indexed for MEDLINE]

345: Ono T, Saito H, Kishimoto T, Okumoto T, Miyamoto K. Related Articles, Links

Stimulation of biosynthesis of nerve growth factor by acidic fibroblast

growth factor in cultured mouse astrocytes.
Neurosci Lett. 1991 May 13;126(1):18-20.
PMID: 1714063 [PubMed - indexed for MEDLINE]

346: Yamada K, Kinoshita A, Kohmura E, Sakaguchi T, Taguchi J, Kataoka K, Hayakawa T. Related Articles, Links

Basic fibroblast growth factor prevents thalamic degeneration after cortical infarction.
J Cereb Blood Flow Metab. 1991 May;11(3):472-8.
PMID: 2016355 [PubMed - indexed for MEDLINE]

347: Fukumoto H, Kakihana M, Suno M. Related Articles, Links

Recombinant human basic fibroblast growth factor (rhbFGF) induces secretion of nerve growth factor (NGF) in cultured rat astroglial cells.
Neurosci Lett. 1991 Jan 28;122(2):221-4.
PMID: 2027522 [PubMed - indexed for MEDLINE]

348: Morrison RS. Related Articles, Links

Suppression of basic fibroblast growth factor expression by antisense oligodeoxynucleotides inhibits the growth of transformed human astrocytes.
J Biol Chem. 1991 Jan 15;266(2):728-34.
PMID: 1845992 [PubMed - indexed for MEDLINE]

349: Yoshida K, Gage FH. Related Articles, Links

Fibroblast growth factors stimulate nerve growth factor synthesis and secretion by astrocytes.
Brain Res. 1991 Jan 4;538(1):118-26.
PMID: 1708303 [PubMed - indexed for MEDLINE]

350: Pettmann B, Janet T, Labourdette G, Sensenbrenner M, Manthorpe M, Varon S. Related Articles, Links

Biologically active basic fibroblast growth factor migrates at 27 kD in "non-denaturing" SDS-polyacrylamide gel electrophoresis.
Growth Factors. 1991;5(3):209-20.
PMID: 1777234 [PubMed - indexed for MEDLINE]

351: McKinnon RD, Matsui T, Aranda M, Dubois-Dalcq M. Related Articles, Links

A role for fibroblast growth factor in oligodendrocyte development.
Ann N Y Acad Sci. 1991;638:378-86.
PMID: 1723857 [PubMed - indexed for MEDLINE]

352: Eckenstein F, Woodward WR, Nishi R. Related Articles, Links

Differential localization and possible functions of aFGF and bFGF in the central and peripheral nervous systems.
Ann N Y Acad Sci. 1991;638:348-60.
PMID: 1723856 [PubMed - indexed for MEDLINE]

353: Zagzag D, Miller DC, Sato Y, Rifkin DB, Burstein DE. Related Articles, Links

Immunohistochemical localization of basic fibroblast growth factor in astrocytomas.
Cancer Res. 1990 Nov 15;50(22):7393-8.
PMID: 2171762 [PubMed - indexed for MEDLINE]

354: McKinnon RD, Matsui T, Dubois-Dalcq M, Aaronson SA. Related Articles, Links

FGF modulates the PDGF-driven pathway of oligodendrocyte development.
Neuron. 1990 Nov;5(5):603-14.

h cb h g e e e fcg b e

PMID: 2171589 [PubMed - indexed for MEDLINE]

355: Armstrong R, Friedrich VL Jr, Holmes KV, Dubois-Dalcq M. Related Articles, Links

In vitro analysis of the oligodendrocyte lineage in mice during demyelination and remyelination.
J Cell Biol. 1990 Sep;111(3):1183-95.
PMID: 2167897 [PubMed - indexed for MEDLINE]

356: Labourdette G, Janet T, Laeng P, Perraud F, Lawrence D, Pettmann B. Related Articles, Links

Transforming growth factor type beta 1 modulates the effects of basic fibroblast growth factor on growth and phenotypic expression of rat astroblasts in vitro.
J Cell Physiol. 1990 Sep;144(3):473-84.
PMID: 1975257 [PubMed - indexed for MEDLINE]

357: Bogler O, Wren D, Barnett SC, Land H, Noble M. Related Articles, Links

Cooperation between two growth factors promotes extended self-renewal and inhibits differentiation of oligodendrocyte-type-2 astrocyte (O-2A) progenitor cells.
Proc Natl Acad Sci U S A. 1990 Aug;87(16):6368-72.
PMID: 2201028 [PubMed - indexed for MEDLINE]

358: Lillien LE, Sendtner M, Raff MC. Related Articles, Links

Extracellular matrix-associated molecules collaborate with ciliary neurotrophic factor to induce type-2 astrocyte development.
J Cell Biol. 1990 Aug;111(2):635-44.
PMID: 2199462 [PubMed - indexed for MEDLINE]

359: Hisanaga K, Sagar SM, Hicks KJ, Swanson RA, Sharp FR. Related Articles, Links

c-fos proto-oncogene expression in astrocytes associated with differentiation or proliferation but not depolarization.
Brain Res Mol Brain Res. 1990 Jun;8(1):69-75.
PMID: 2166202 [PubMed - indexed for MEDLINE]

360: Courtin F, Gavaret JM, Toru-Delbauffe D, Pierre M. Related Articles, Links

Induction of 5'-deiodinase activity in rat astroglial cells by acidic fibroblast growth factor.
Brain Res Dev Brain Res. 1990 May 1;53(2):237-42.
PMID: 2357797 [PubMed - indexed for MEDLINE]

361: Noble M, Barnett SC, Bogler O, Land H, Wolswijk G, Wren D. Related Articles, Links

Control of division and differentiation in oligodendrocyte-type-2 astrocyte progenitor cells.
Ciba Found Symp. 1990;150:227-43; discussion 244-9.
PMID: 2373025 [PubMed - indexed for MEDLINE]

362: Neuhaus J. Related Articles, Links

Orthogonal arrays of particles in astroglial cells: quantitative analysis of their density, size, and correlation with intramembranous particles.
Glia. 1990;3(4):241-51.
PMID: 2144504 [PubMed - indexed for MEDLINE]

363: Perraud F, Labourdette G, Eclancher F, Sensenbrenner M. Related Articles, Links

Primary cultures of astrocytes from different brain areas of newborn rats and effects of basic fibroblast growth factor.
Dev Neurosci. 1990;12(1):11-21.
PMID: 1967574 [PubMed - indexed for MEDLINE]

364: Barotte C, Eclancher F, Ebel A, Labourdette G, Sensenbrenner M, Will B. Related Articles, Links

Effects of basic fibroblast growth factor (bFGF) on choline acetyltransferase activity and astroglial reaction in adult rats after partial fimbria transection.
Neurosci Lett. 1989 Jun 19;101(2):197-202.
PMID: 2771166 [PubMed - indexed for MEDLINE]

365: Ferrara N, Ousley F, Gospodarowicz D. Related Articles, Links

Bovine brain astrocytes express basic fibroblast growth factor, a neurotropic and angiogenic mitogen.
Brain Res. 1988 Oct 18;462(2):223-32.
PMID: 3191384 [PubMed - indexed for MEDLINE]

366: Rogister B, Leprince P, Pettmann B, Labourdette G, Sensenbrenner M, Moonen G. Related Articles, Links

Brain basic fibroblast growth factor stimulates the release of plasminogen activators by newborn rat cultured astroglial cells.
Neurosci Lett. 1988 Sep 12;91(3):321-6.
PMID: 3185969 [PubMed - indexed for MEDLINE]

367: Morrison RS, Keating RF, Moskal JR. Related Articles, Links

Basic fibroblast growth factor and epidermal growth factor exert differential trophic effects on CNS neurons.
J Neurosci Res. 1988 Sep;21(1):71-9.
PMID: 3265159 [PubMed - indexed for MEDLINE]

368: Walicke PA, Baird A. Related Articles, Links

Neurotrophic effects of basic and acidic fibroblast growth factors are not mediated through glial cells.
Brain Res. 1988 May 1;468(1):71-9.
PMID: 3132309 [PubMed - indexed for MEDLINE]

369: Perraud F, Labourdette G, Miehe M, Loret C, Sensenbrenner M. Related Articles, Links

Comparison of the morphological effects of acidic and basic fibroblast growth factors on rat astroblasts in culture.
J Neurosci Res. 1988 May;20(1):1-11.
PMID: 3047413 [PubMed - indexed for MEDLINE]

370: Hatten ME, Lynch M, Rydel RE, Sanchez J, Joseph-Silverstein J, Moscatelli D, Rifkin DB. Related Articles, Links

In vitro neurite extension by granule neurons is dependent upon astroglial-derived fibroblast growth factor.
Dev Biol. 1988 Feb;125(2):280-9.
PMID: 3338615 [PubMed - indexed for MEDLINE]

371: Perraud F, Besnard F, Pettmann B, Sensenbrenner M, Labourdette G. Related Articles, Links

Effects of acidic and basic fibroblast growth factors (aFGF and bFGF) on the proliferation and the glutamine synthetase expression of rat astroblasts in culture.
Glia. 1988;1(2):124-31. Erratum in: GLIA 1989;2(1):70.
PMID: 2906331 [PubMed - indexed for MEDLINE]

372: Perraud F, Besnard F, Sensenbrenner M, Labourdette G. Related Articles, Links

Thrombin is a potent mitogen for rat astroblasts but not for oligodendroblasts and neuroblasts in primary culture.
Int J Dev Neurosci. 1987;5(3):181-8.

PMID: 3332541 [PubMed - indexed for MEDLINE]

373: Wolburg H, Neuhaus J, Pettmann B, Labourdette G, Sensenbrenner M. Related Articles, Links

Decrease in the density of orthogonal arrays of particles in membranes of cultured rat astroglial cells by the brain fibroblast growth factor.
Neurosci Lett. 1986 Dec 3;72(1):25-30.
PMID: 3808459 [PubMed - indexed for MEDLINE]

Display Summary Show: 500 Sort Send to Text

Items 1-373 of 373 One page.

h cb h g e e e fcg b e

NCBI PubMed National Library of Medicine NLM

Entrez PubMed Nucleotide Protein Genome Structure OMIM PMC Journals Boo

Search PubMed for bFGF AND human neural progenitor cell Go Clear

Limits Preview/Index History Clipboard Details

About Entrez

Text Version

Entrez PubMed
Overview
Help | FAQ
Tutorial
New/Noteworthy
E-Utilities

PubMed Services
Journals Database
MeSH Database
Single Citation Matcher
Batch Citation Matcher
Clinical Queries
LinkOut
Cubby

Related Resources
Order Documents
NLM Gateway
TOXNET
Consumer Health
Clinical Alerts
ClinicalTrials.gov
PubMed Central

Privacy Policy

Display Summary Show: 500 Sort Send to Text

Items 1-31 of 31 One page.

1: Liang P, Zhao S, Kawamoto K, Jin L, Liu E. Related Articles, Links

Neuronal and glial differentiation following culture of the human embryonic cortical stem cells.
Hum Cell. 2003 Sep;16(3):151-6.
PMID: 15005246 [PubMed - indexed for MEDLINE]

2: Cook AL, Donatien PD, Smith AG, Murphy M, Jones MK, Herlyn M, Bennett DC, Leonard JH, Sturm RA. Related Articles, Links

Human melanoblasts in culture: expression of BRN2 and synergistic regulation by fibroblast growth factor-2, stem cell factor, and endothelin-3.
J Invest Dermatol. 2003 Nov;121(5):1150-9.
PMID: 14708619 [PubMed - indexed for MEDLINE]

3: Marchal-Victorion S, Deleyrolle L, De Weille J, Saunier M, Dromard C, Sandillon F, Privat A, Hugnot JP. Related Articles, Links

The human NTERA2 neural cell line generates neurons on growth under neural stem cell conditions and exhibits characteristics of radial glial cells.
Mol Cell Neurosci. 2003 Sep;24(1):198-213.
PMID: 14550780 [PubMed - indexed for MEDLINE]

4: Irvin DK, Dhaka A, Hicks C, Weinmaster G, Kornblum HI. Related Articles, Links

Extrinsic and intrinsic factors governing cell fate in cortical progenitor cultures.
Dev Neurosci. 2003 Mar-Aug;25(2-4):162-72.
PMID: 12966214 [PubMed - indexed for MEDLINE]

5: Calhoun JD, Lambert NA, Mitalipova MM, Noggle SA, Lyons I, Condie BG, Stice SL. Related Articles, Links

Differentiation of rhesus embryonic stem cells to neural progenitors and neurons.
Biochem Biophys Res Commun. 2003 Jun 20;306(1):191-7.
PMID: 12788087 [PubMed - indexed for MEDLINE]

6: Okada S, Okano H. Related Articles, Links

[Regulatory mechanisms of neural stem cell and strategies for therapy]
Nippon Rinsho. 2003 Mar;61(3):449-56. Review. Japanese.
PMID: 12701172 [PubMed - indexed for MEDLINE]

7: Park Y, Rangel C, Reynolds MM, Caldwell MC, Johns M, Nayak M, Welsh CJ, McDermott S, Datta S. Related Articles, Links

Drosophila perlecan modulates FGF and hedgehog signals to activate neural stem cell division.
Dev Biol. 2003 Jan 15;253(2):247-57.
PMID: 12645928 [PubMed - indexed for MEDLINE]

8: Cairns K, Finklestein SP. Related Articles, Links

Growth factors and stem cells as treatments for stroke recovery.
Phys Med Rehabil Clin N Am. 2003 Feb;14(1 Suppl):S135-42. Review.

h cb h g e e e fcg e ch b e

PMID: 12625643 [PubMed - indexed for MEDLINE]

9: Vicario I, Schimmang T. Related Articles, Links

Transfer of FGF-2 via HSV-1-based amplicon vectors promotes efficient formation of neurons from embryonic stem cells.
J Neurosci Methods. 2003 Feb 15;123(1):55-60.
PMID: 12581849 [PubMed - indexed for MEDLINE]

10: Hermanson O, Jepsen K, Rosenfeld MG. Related Articles, Links

N-CoR controls differentiation of neural stem cells into astrocytes.
Nature. 2002 Oct 31;419(6910):934-9. Epub 2002 Oct 16.
PMID: 12410313 [PubMed - indexed for MEDLINE]

11: Dietrich J, Noble M, Mayer-Proschel M. Related Articles, Links

Characterization of A2B5+ glial precursor cells from cryopreserved human fetal brain progenitor cells.
Glia. 2002 Oct;40(1):65-77.
PMID: 12237844 [PubMed - indexed for MEDLINE]

12: Vela JM, Molina-Holgado E, Arevalo-Martin A, Almazan G, Guaza C. Related Articles, Links

Interleukin-1 regulates proliferation and differentiation of oligodendrocyte progenitor cells.
Mol Cell Neurosci. 2002 Jul;20(3):489-502.
PMID: 12139924 [PubMed - indexed for MEDLINE]

13: Torrente Y, Belicchi M, Pisati F, Pagano SF, Fortunato F, Sironi M, D'Angelo MG, Parati EA, Scarlato G, Bresolin N. Related Articles, Links

Alternative sources of neurons and glia from somatic stem cells.
Cell Transplant. 2002;11(1):25-34.
PMID: 12095217 [PubMed - indexed for MEDLINE]

14: Bicknese AR, Goodwin HS, Quinn CO, Henderson VC, Chien SN, Wall DA. Related Articles, Links

Human umbilical cord blood cells can be induced to express markers for neurons and glia.
Cell Transplant. 2002;11(3):261-4.
PMID: 12075991 [PubMed - indexed for MEDLINE]

15: Zhang SC, Wernig M, Duncan ID, Brustle O, Thomson JA. Related Articles, Links

In vitro differentiation of transplantable neural precursors from human embryonic stem cells.
Nat Biotechnol. 2001 Dec;19(12):1129-33.
PMID: 11731781 [PubMed - indexed for MEDLINE]

16: Shih CC, Weng Y, Mamelak A, LeBon T, Hu MC, Forman SJ. Related Articles, Links

Identification of a candidate human neurohematopoietic stem-cell population.
Blood. 2001 Oct 15;98(8):2412-22.
PMID: 11588038 [PubMed - indexed for MEDLINE]

17: Storch A, Paul G, Csete M, Boehm BO, Carvey PM, Kupsch A, Schwarz J. Related Articles, Links

Long-term proliferation and dopaminergic differentiation of human mesencephalic neural precursor cells.
Exp Neurol. 2001 Aug;170(2):317-25.
PMID: 11476598 [PubMed - indexed for MEDLINE]

18: Arsenijevic Y, Villemure JG, Brunet JF, Bloch JJ, Deglon N, Kostic C, Zurn A, Aebischer P. Related Articles, Links

Isolation of multipotent neural precursors residing in the cortex of the adult human brain.
Exp Neurol. 2001 Jul;170(1):48-62.
PMID: 11421583 [PubMed - indexed for MEDLINE]

19: Akiyama Y, Honmou O, Kato T, Uede T, Hashi K, Kocsis JD. Related Articles, Links

Transplantation of clonal neural precursor cells derived from adult human brain establishes functional peripheral myelin in the rat spinal cord.
Exp Neurol. 2001 Jan;167(1):27-39.
PMID: 11161590 [PubMed - indexed for MEDLINE]

20: Zhang F, Clarke JD, Ferretti P. Related Articles, Links

FGF-2 Up-regulation and proliferation of neural progenitors in the regenerating amphibian spinal cord in vivo.
Dev Biol. 2000 Sep 15;225(2):381-91.
PMID: 10985857 [PubMed - indexed for MEDLINE]

21: Rosser AE, Tyers P, Dunnett SB. Related Articles, Links

The morphological development of neurons derived from EGF- and FGF-2-driven human CNS precursors depends on their site of integration in the neonatal rat brain.
Eur J Neurosci. 2000 Jul;12(7):2405-13.
PMID: 10947819 [PubMed - indexed for MEDLINE]

22: Ostenfeld T, Caldwell MA, Prowse KR, Linskens MH, Jauniaux E, Svendsen CN. Related Articles, Links

Human neural precursor cells express low levels of telomerase in vitro and show diminishing cell proliferation with extensive axonal outgrowth following transplantation.
Exp Neurol. 2000 Jul;164(1):215-26.
PMID: 10877932 [PubMed - indexed for MEDLINE]

23: Villa A, Snyder EY, Vescovi A, Martinez-Serrano A. Related Articles, Links

Establishment and properties of a growth factor-dependent, perpetual neural stem cell line from the human CNS.
Exp Neurol. 2000 Jan;161(1):67-84.
PMID: 10683274 [PubMed - indexed for MEDLINE]

24: Zhu G, Mehler MF, Zhao J, Yu Yung S, Kessler JA. Related Articles, Links

Sonic hedgehog and BMP2 exert opposing actions on proliferation and differentiation of embryonic neural progenitor cells.
Dev Biol. 1999 Nov 1;215(1):118-29.
PMID: 10525354 [PubMed - indexed for MEDLINE]

25: Carpenter MK, Cui X, Hu ZY, Jackson J, Sherman S, Seiger A, Wahlberg LU. Related Articles, Links

In vitro expansion of a multipotent population of human neural progenitor cells.
Exp Neurol. 1999 Aug;158(2):265-78.
PMID: 10415135 [PubMed - indexed for MEDLINE]

26: Svendsen CN, ter Borg MG, Armstrong RJ, Rosser AE, Chandran S, Ostenfeld T, Caldwell MA. Related Articles, Links

A new method for the rapid and long term growth of human neural precursor cells.
J Neurosci Methods. 1998 Dec 1;85(2):141-52.
PMID: 9874150 [PubMed - indexed for MEDLINE]

27: Derrington EA, Dufay N, Rudkin BB, Belin MF. Related Articles, Links

Human primitive neuroectodermal tumour cells behave as multipotent neural precursors in response to FGF2.
Oncogene. 1998 Oct 1;17(13):1663-72.
PMID: 9796695 [PubMed - indexed for MEDLINE]

28: Pincus DW, Keyoung HM, Harrison-Restelli C, Goodman RR, Fraser RA, Edgar M, Sakakibara S, Okano H, Nedergaard M, Goldman SA. Related Articles, Links

Fibroblast growth factor-2/brain-derived neurotrophic factor-associated maturation of new neurons generated from adult human subependymal cells.
Ann Neurol. 1998 May;43(5):576-85.
PMID: 9585351 [PubMed - indexed for MEDLINE]

29: Svendsen CN, Caldwell MA, Shen J, ter Borg MG, Rosser AE, Tyers P, Karmiol S, Dunnett SB. Related Articles, Links

Long-term survival of human central nervous system progenitor cells transplanted into a rat model of Parkinson's disease.
Exp Neurol. 1997 Nov;148(1):135-46.
PMID: 9398456 [PubMed - indexed for MEDLINE]

30: Kitchens DL, Snyder EY, Gottlieb DI. Related Articles, Links

FGF and EGF are mitogens for immortalized neural progenitors.
J Neurobiol. 1994 Jul;25(7):797-807.
PMID: 8089657 [PubMed - indexed for MEDLINE]

31: Rettig WJ, Erickson HP, Albino AP, Garin-Chesa P. Related Articles, Links

Induction of human tenascin (neuronectin) by growth factors and cytokines: cell type-specific signals and signalling pathways.
J Cell Sci. 1994 Feb;107 (Pt 2):487-97.
PMID: 7515896 [PubMed - indexed for MEDLINE]

Display Summary Show: 500 Sort Send to Text
Items 1-31 of 31 One page.

h cb h g e e e fcg e ch b e

Connecting via Winsock to STN
Welcome to STN International! Enter x:x
* * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
SESSION RESUMED IN FILE 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR,
AQUASCI, BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHDS, CABA, CANCERLIT, CAPLUS,
CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DISSABS, DGENE, DRUGB, DRUGMONOG2,
IMSDRUGNEWS, DRUGU, IMSRESEARCH, EMBAL, EMBASE, ESBIOBASE, FEDRIP, FOMAD,
FOREGE, FROSTI, FSTA, GENBANK, HEALSAFE, IFIPAT, IMSPRODUCT, JICST-EPLUS,
KOSMET, LIFESCI, MEDICONF, MEDLINE, NIOSHTIC, NTIS, NUTRACEUT, OCEAN, PASCAL,
PCTGEN, PHAR, PHARMAML, PHIC, PHIN, PROMT, RDISCLOSURE, SCISEARCH, SYNTHLINE,
TOXCENTER, USPATFULL, USPAT2, VETB, VETU, WPIDS' AT 15:46:22 ON 23 APR 2004
FILE 'ADISCTI' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (C) 2004 Adis Data Information BV
FILE 'ADISINSIGHT' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (C) 2004 Adis Data Information BV
FILE 'ADISNEWS' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (C) 2004 Adis Data Information BV
FILE 'AGRICOLA' ENTERED AT 15:46:22 ON 23 APR 2004
FILE 'ANABSTR' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (c) 2004 THE ROYAL SOCIETY OF CHEMISTRY (RSC)
FILE 'AQUASCI' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT 2004 FAO (On behalf of the ASFA Advisory Board). All rights reserved.
FILE 'BIOBUSINESS' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (C) 2004 Biological Abstracts, Inc. (BIOSIS)
FILE 'BIOCOMMERCE' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (C) 2004 BioCommerce Data Ltd. Richmond Surrey, United Kingdom. All rights reserved
FILE 'BIOSIS' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (C) 2004 BIOLOGICAL ABSTRACTS INC.(R)
FILE 'BIOTECHDS' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (C) 2004 THOMSON DERWENT AND INSTITUTE FOR SCIENTIFIC INFORMATION
FILE 'CABA' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (C) 2004 CAB INTERNATIONAL (CABI)
FILE 'CANCERLIT' ENTERED AT 15:46:22 ON 23 APR 2004
FILE 'CAPLUS' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)
FILE 'CEABA-VTB' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (c) 2004 DECHEMA eV
FILE 'CEN' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (C) 2004 American Chemical Society (ACS)
FILE 'CIN' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (C) 2004 American Chemical Society (ACS)
FILE 'CONFSCI' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (C) 2004 Cambridge Scientific Abstracts (CSA)
FILE 'CROPB' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (C) 2004 THOMSON DERWENT
FILE 'CROPU' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (C) 2004 THOMSON DERWENT
FILE 'DISSABS' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (C) 2004 ProQuest Information and Learning Company; All Rights Reserved.
FILE 'DGENE' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (C) 2004 THOMSON DERWENT
FILE 'DRUGB' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (C) 2004 THOMSON DERWENT
FILE 'DRUGMONOG2' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (C) 2004 IMSWORLD Publications Ltd
FILE 'IMSDRUGNEWS' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (C) 2004 IMSWORLD Publications Ltd
FILE 'DRUGU' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (C) 2004 THOMSON DERWENT
FILE 'IMSRESEARCH' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (C) 2004 IMSWORLD Publications Ltd
FILE 'EMBAL' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (C) 2004 Elsevier Inc. All rights reserved.
FILE 'EMBASE' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (C) 2004 Elsevier Inc. All rights reserved.
FILE 'ESBIOBASE' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (C) 2004 Elsevier Science B.V., Amsterdam. All rights reserved.
FILE 'FEDRIP' ENTERED AT 15:46:22 ON 23 APR 2004
FILE 'FOMAD' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (C) 2004 Leatherhead Food Research Association
FILE 'FOREGE' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (C) 2004 Leatherhead Food Research Association
FILE 'FROSTI' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (C) 2004 Leatherhead Food Research Association
FILE 'FSTA' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (C) 2004 International Food Information Service

```
FILE 'GENBANK' ENTERED AT 15:46:22 ON 23 APR 2004
FILE 'HEALSAFE' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (C) 2004 Cambridge Scientific Abstracts (CSA)
FILE 'IFIPAT' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (C) 2004 IFI CLAIMS(R) Patent Services (IFI)
FILE 'IMSPRODUCT' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (C) 2004 IMSWORLD Publications Ltd
FILE 'JICST-EPLUS' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (C) 2004 Japan Science and Technology Agency (JST)
FILE 'KOSMET' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (C) 2004 International Federation of the Societies of Cosmetics Chemists
FILE 'LIFESCI' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (C) 2004 Cambridge Scientific Abstracts (CSA)
FILE 'MEDICONF' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (c) 2004 FAIRBASE Datenbank GmbH, Hannover, Germany
FILE 'MEDLINE' ENTERED AT 15:46:22 ON 23 APR 2004
FILE 'NIOSHTIC' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (C) 2004 U.S. Secretary of Commerce on Behalf of the U.S. Government
FILE 'NTIS' ENTERED AT 15:46:22 ON 23 APR 2004
All rights reserved. (2004)
FILE 'NUTRACEUT' ENTERED AT 15:46:22 ON 23 APR 2004
Copyright 2004 (c) MARKETLETTER Publications Ltd. All rights reserved.
FILE 'OCEAN' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (C) 2004 Cambridge Scientific Abstracts (CSA)
FILE 'PASCAL' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (C) 2004 INIST-CNRS. All rights reserved.
FILE 'PCTGEN' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (C) 2004 WIPO
FILE 'PHAR' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (C) 2004 PJB Publications Ltd. (PJB)
FILE 'PHARMAML' ENTERED AT 15:46:22 ON 23 APR 2004
Copyright 2004 (c) MARKETLETTER Publications Ltd. All rights reserved.
FILE 'PHIC' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (C) 2004 PJB Publications Ltd. (PJB)
FILE 'PHIN' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (C) 2004 PJB Publications Ltd. (PJB)
FILE 'PROMT' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (C) 2004 Gale Group. All rights reserved.
FILE 'RDISCLOSURE' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (C) 2004 Kenneth Mason Publications Ltd.
FILE 'SCISEARCH' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT 2004 THOMSON ISI
FILE 'SYNTHLINE' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (C) 2004 Prous Science
FILE 'TOXCENTER' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (C) 2004 ACS
FILE 'USPATFULL' ENTERED AT 15:46:22 ON 23 APR 2004
CA INDEXING COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)
FILE 'USPAT2' ENTERED AT 15:46:22 ON 23 APR 2004
CA INDEXING COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)
FILE 'VETB' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (C) 2004 THOMSON DERWENT
FILE 'VETU' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (C) 2004 THOMSON DERWENT
FILE 'WPIDS' ENTERED AT 15:46:22 ON 23 APR 2004
COPYRIGHT (C) 2004 THOMSON DERWENT

=> S bFGF OR basic FGF OR FGF-2
COMMAND INTERRUPTED
  11 FILES SEARCHED...
  30 FILES SEARCHED...
  51 FILES SEARCHED...
L1        73127 BFGF OR BASIC FGF OR FGF-2
=> S L1 AND astrocyte
  46 FILES SEARCHED...
L2         4283 L1 AND ASTROCYTE

=> DUP REM L2
DUPLICATE IS NOT AVAILABLE IN 'ADISINSIGHT, ADISNEWS, BIOCOMMERCE, DGENE,
DRUGMONOG2, IMSRESEARCH, FEDRIP, FOREGE, GENBANK, IMSPRODUCT, KOSMET,
MEDICONF, NUTRACEUT, PCTGEN, PHAR, PHARMAML, RDISCLOSURE, SYNTHLINE'.
ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE
PROCESSING IS APPROXIMATELY  27% COMPLETE FOR L2
PROCESSING IS APPROXIMATELY  59% COMPLETE FOR L2
PROCESSING IS APPROXIMATELY  98% COMPLETE FOR L2
PROCESSING COMPLETED FOR L2
```

L3 1956 DUP REM L2 (2327 DUPLICATES REMOVED)

=> S L3 AND human neural progenitor
12 FILES SEARCHED...
22 FILES SEARCHED...
36 FILES SEARCHED...
49 FILES SEARCHED...
62 FILES SEARCHED...
L4 24 L3 AND HUMAN NEURAL PROGENITOR

=> D L4 1-24

L4 ANSWER 1 OF 24 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
AN 2004:201193 BIOSIS
DN PREV200400201751
TI Notch ligands and their role in the proliferation and fate of ***human*** ***neural*** ***progenitor*** cells.
AU Mori, A. [Reprint Author]; Schwartz, P. H.; Palmer, T. D. [Reprint Author]
CS Dept. Neurosurgery, Stanford Univ, Stanford, CA, USA
SO Society for Neuroscience Abstract Viewer and Itinerary Planner, (2003) Vol. 2003, pp. Abstract No. 562.9. http://sfn.scholarone.com. e-file.
Meeting Info.: 33rd Annual Meeting of the Society of Neuroscience. New Orleans, LA, USA. November 08-12, 2003. Society of Neuroscience.
DT Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LA English
ED Entered STN: 14 Apr 2004
Last Updated on STN: 14 Apr 2004

L4 ANSWER 2 OF 24 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
AN 2003:326070 BIOSIS
DN PREV200300326070
TI ***HUMAN*** ***NEURAL*** ***PROGENITOR*** CELLS SHOW NORMAL VENTROLATERAL MIGRATION IN ORGAN CULTURES OF HUMAN EMBRYONIC MESENCEPHALON.
AU Jarman, R. G. [Reprint Author]; Freed, C. R. [Reprint Author]
CS Div Clin Pharm, Dept of Med, Univ Colo Sch of Med, Denver, CO, USA
SO Society for Neuroscience Abstract Viewer and Itinerary Planner, (2002) Vol. 2002, pp. Abstract No. 726.7. http://sfn.scholarone.com. cd-rom.
Meeting Info.: 32nd Annual Meeting of the Society for Neuroscience. Orlando, Florida, USA. November 02-07, 2002. Society for Neuroscience.
DT Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LA English
ED Entered STN: 16 Jul 2003
Last Updated on STN: 16 Jul 2003

L4 ANSWER 3 OF 24 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
AN 2001:562570 BIOSIS
DN PREV200100562570
TI Induction of tyrosine hydroxylase expression in growth factor expanded cultures of ***human*** ***neural*** ***progenitor*** cells.
AU Gronborg, M. [Reprint author]; Meijer, X.; Christophersen, N. S. [Reprint author]; Juliusson, B. [Reprint author]; Seiger, A.; Wahlberg, L. U. [Reprint author]
CS Cellular Biology, NsGene A/S, Ballerup, Denmark
SO Society for Neuroscience Abstracts, (2001) Vol. 27, No. 2, pp. 1821. print.
Meeting Info.: 31st Annual Meeting of the Society for Neuroscience. San Diego, California, USA. November 10-15, 2001.
ISSN: 0190-5295.
DT Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LA English
ED Entered STN: 5 Dec 2001
Last Updated on STN: 25 Feb 2002

L4 ANSWER 4 OF 24 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
AN 2000:67028 BIOSIS
DN PREV200000067028
TI Site-specific neuronal differentiation of growth factor expanded ***human*** ***neural*** ***progenitor*** cells after transplantation to the neonatal rat brain.
AU Englund, U. [Reprint author]; Fricker, R. A. [Reprint author]; Carpenter, M. K.; Jackson, J.; Sherman, S.; Wictorin, K. [Reprint author]; Bjorklund, A. [Reprint author]

CS Wallenberg Neurocentrum, Lund Univ., Lund, Sweden
SO Society for Neuroscience Abstracts, (1999) Vol. 25, No. 1-2, pp. 213. print.
Meeting Info.: 29th Annual Meeting of the Society for Neuroscience, Part 1. Miami Beach, Florida, USA. October 23-28, 1999. The Society for Neuroscience.
ISSN: 0190-5295.
DT Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LA English
ED Entered STN: 9 Feb 2000
Last Updated on STN: 3 Jan 2002

L4 ANSWER 5 OF 24 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
AN 1999:392070 BIOSIS
DN PREV199900392070
TI In vitro expansion of a multipotent population of ***human*** ***neural*** ***progenitor*** cells.
AU Carpenter, Melissa K. [Reprint author]; Cui, Xia; Hu, Zhong-yi; Jackson, Jennifer; Sherman, Sandy; Seiger, Ake; Wahlberg, Lars U.
CS Geron Corporation, 230 Constitution Dr., Menlo Park, CA, 94025, USA
SO Experimental Neurology, (Aug., 1999) Vol. 158, No. 2, pp. 265-278. print.
CODEN: EXNEAC. ISSN: 0014-4886.
DT Article
LA English
ED Entered STN: 28 Sep 1999
Last Updated on STN: 28 Sep 1999

L4 ANSWER 6 OF 24 IFIPAT COPYRIGHT 2004 IFI on STN
AN 10459418 IFIPAT;IFIUDB;IFICDB
TI TREATMENT OF CENTRAL NERVOUS SYSTEM DISORDERS
IN Delfani Kioumars (SE); Janson Ann Marie (SE); Kuhn H Georg (DE); Plate Karlheinz (DE); Schanzer Anne (DE); Wachs Frank-Peter (DE); Zhao Ming (SE)
PA Unassigned Or Assigned To Individual (68000)
PI US 2003203844 A1 20031030
AI US 2002-246091 20020918
PRAI US 2001-323381P 20010919 (Provisional)
US 2001-326044P 20010928 (Provisional)
FI US 2003203844 20031030
DT Utility; Patent Application - First Publication
FS CHEMICAL
APPLICATION
CLMN 106
GI 35 Figure(s).
FIG. 1 depicts the effect of PDGFs on proliferation of cultured, non-adherent mouse neurospheres.
FIG. 2 shows the effect of PDGFs on proliferation of adherent cultured mouse NSC/progenitor cells.
FIG. 3 is Western blots showing the effect of PDGF-AA in cultured neurospheres. Downregulation of GFAP (left); upregulation of beta-III Tubulin (right).
FIG. 4 depicts the effect of PDGF-AA in cultured mouse NCCs/ neural progenitor cells (NPCs). Upper panel: adult mouse NSCs treated with PDGF-AA for 6 days switch from an undifferentiated (left panel) to a neuronal phenotype (right panel) increasing the specific neuronal marker beta-III Tubulin. Lower panel: in contrast to the above, adult mouse NSCs treated with PDGF-AA for 6 days significantly decrease the specific expression of the glial specific marker GFAP indicating that the astroglial component was reduced in presence of PDGF-AA.
FIG. 5 shows the effect of PDGF-AA and PDGF-BB on neuronal differentiation of adult mouse stem cells. Compared to the control (panel A) the stimulation with PDGF-AA (panel B) and PDGF-BB (panel C) significantly increase the number of betaIII Tubulin positive cells in culture.
FIG. 6 is a Western blot showing the effect of PDGF-AA and PDGFBB on neuronal differentiation of adult mouse stem cells. Compared with the control (A) the stimulation with PDGF-AA (B) and PDGF-BB (C) significantly increased levels of beta-III Tubulin protein. Sample loads were normalized.
FIG. 7 represents the effect of PDGF-BB on the number of BrdU positive cells in the dentate gyrus.
FIG. 8 shows the effect of PDGF-BB on BrdU positive cells in the striatum.
FIG. 9 depicts a large neuron in the MPTP-lesioned mouse receiving PDGF. This tyrosine hydroxylase-positive (brown) nerve cell with a violet nucleolus in the centrally placed nucleus without brown staining had an estimated volume of 10, 900 mu m3. Anti-tyrosine hydroxylase was

visualized with the avidin-biotin-peroxidase-DAB method and cresyl violet was employed as counterstain. Bar=10 mu m.

FIG. 10 represents a small tyrosine hydroxylase-positive neuron in the MPTP-lesioned PDGF-treated mouse. The cell had an estimated volume of 170 mu m3, e.g. similar to a small glia cell, but demonstrated a clear neuronal bipolar phenotype with long dendrites that extended for more than 100 mu m in the 40 mu m thick section.

FIG. 11 shows a 3H thymidine label (black dots) over a substantia nigra neuron (Nissl stain) in a PDGF-treated MPTPlesioned mouse. Bar=10 mu m.

FIG. 12 shows that PDGFR-A and PDGFR-B genes are expressed in cultured human neural stem cells.

FIG. 13 shows immunohistochemically stained BrdU-labeled cells in the striatum at 5 weeks after PDGF infusion. (A) PBS control, (B) PDGF treated.

FIG. 14 represents the number of BrdU-labeled cells in the striatum at 12 days and 5 weeks after PDGF or BDNF infusion. *p less-than 0.05 compared to PBS infused controls. Means+-SEM.

FIG. 15 depicts the number of BrdU/NeuN double-labelled cells in the striatum at 5 weeks after PDGF or BDNF infusion. Note that due to heterogeneity of variance with groups, data were logarithmically transformed. *p less-than 0.05 compared to PBS infused controls. Means+-SEM.

FIG. 16 shows the number of BrdU-labeled cells in the substantia nigra at 12 days and 5 weeks after PDGF or BDNF infusion. *p less-than 0.05 compared to PBS infused controls. Means+-SEM.

FIG. 17 depicts neurogenesis in the hippocampus which is characterized by proliferative clusters of cells along the border between the granule cell layer (g) and the hilus region (h). These cells begin to migrate into the granule cell layer about 1 week after their last cell division and can be colabeled with markers for granule cells (e.g., NeuN and Calbindin).

FIG. 18 represents Flk-1-positive cells in the dentate gyrus. Frequently Flk-1 positive cells are associated with clusters of proliferating cells. These clusters contain endothelial cells as well as NSCs/NPCs. (A) Multiple immunofluorescence with BrdU, VEGF and Flk-1. Note the colocalization of Flk-1 and BrdU. (B) BrdU positive cells are associated with blood vessels as shown with RECA staining (rat endothelial cell antigen).

FIG. 19 shows the localization of Flk-1 immunoreactive cells in the ventricle wall. The ependymal layer of the ventricle wall shows intense immunoreactivity for Flk-1. Since neural stem cells can be generated from ependymal cells of the ventricle wall, Flk-1 could function as a stem cell marker and has perhaps a function in stem cell recruitment.

FIG. 20 represents intracerebroventricular infusion of VEGF. VEGF was infused via osmotic minipumps for 7 days into the lateral ventricle of adult rats. Increased BrdU labeling in the granule cell layer of the dentate gyrus is observed 4 weeks after infusion of VEGF into the lateral ventricle.

FIG. 21 shows VEGF mRNA levels. Neurospheres were cultured in a defined medium in the presence of EGFand FGF. Using RT-PCR, the MRNA from these cells was examined for the expression of 4 different isoforms of VEGF. GADPH expression served as quality control of the mRNA.

FIG. 22 shows Flk-1 mRNA levels. Left. Neural stem cells from the lateral ventricle wall (LV) and hippocampus (HC) of the adult rodent can be grown as neurospheres using defined medium and the growth factors ***FGF*** - ***2*** and EGF. Right. From spheres under growth condition mRNA was isolated and RT-PCT for Flk-1 was performed. Actin was used as a control for mRNA amount.

FIG. 23 shows the release of VEGF protein. Competitive ELISA for quantification of VEGF-secretion was used on adult NSCs from the rat lateral ventricle wall. As a positive control, the endothelial cell line HMEC-1 and primary retinal pigment epithelial cells (RPE) were used.

FIG. 24 depicts VEGF-dependent proliferation of NSCs. Neurosphere cultures were grown in serum free medium containing EGF/ ***FGF*** - ***2*** . VEGF was added to this medium in different concentrations for 7 days and the total number of NSCs was counted.

FIG. 25 shows that the effect of VEGF is modulated via the Flk-1 receptor. NSC cultures were stimulated for 7 days with different concentrations of VEGF-A165 (triangle) and VEGF-A121 (squares). VEGF-A165 bind to all VEGF-receptors whereas VEGFA121 binds preferentially to the Flk-1 receptor.

FIG. 26 shows the lineage potential of clonally-derived rat neural stem cell cultures. Individual clones derived from rat lateral ventricle wall cultured on poly-ornithin/laminin matrix were differentiated in NB/B27 medium supplemented with 1% FCS for 7 days and immunostained for the presence of (a) neurons with BIII-tubulin, (b) ***astrocytes*** with GFAP or (c) oligodendrocytes with GalC (bar=40 mu m).

FIG. 27 is a Dose-Response-Curve for VEGF in rat neural stem cells from the adult lateral ventricle wall. The dose-response curve was performed on clonally derived neural stem cells. Maximal growth activity can be observed starting at 50 ng/ml.
FIG. 28 (A) In basal medium VEGF (50 ng/ml) stimulates the expansion of neural stem cell cultures about 5-fold. The VEGFReceptor inhibitors PADQ and SU1498 are both able to block the VEGF response at concentrations specific for VEGF receptor flk1. Total cell counts at 7 days after treatment. (B) In growth conditions (including EGF and ***FGF*** - ***2***), VEGF stimulates the expansion of neural stem cell cultures about 2-fold. The VEGFReceptor tyrosine kinase inhibitors PADQ and SU1498 are both able to block the VEGF response. Total cell counts at 7 days after treatment in growth medium
FIG. 29 shows VEGF production and release into the cell culture medium. Cells were cultured in serum free medium and medium was collected at 2 days (2 d) or 8 days (8 d) in medium. HUVEC: Human umbilical vein endothelial cells, huRPE: human retinal pigment epithelial cells.
FIG. 30 represents NSCs under growth conditions (with EGF and ***FGF*** - ***2***) VEGF-receptor-Tyrosine kinase receptor blocker PADQ and SU1498 are both able to significantly reduce the growth of neural stem cell cultures. DMSO was used to dissolve the inhibitors and had no effect on the growth rate. Total cell counts at 7 days after treatment.
FIG. 31 shows that BrdU incorporation is increased under VEGF and reduced under VEGF receptor blockade. Neural stem cell cultures were treated with 50 ng/ml VEGF, 100 nM PADQ or 700 nM SU1498 for 7 days. BrdU (10 mu M) was added to the culture medium 24 hrs before cells were harvested and lysed. DNA was extracted and BrdU content was determined using an anti-BrdUELISA. The data are presented as percent changes in optical density compared to control (Growth medium).
FIG. 32 shows that DNA fragementation is increased under VEGF and reduced under VEGF receptor blockade. Neural stem cell cultures were treated with 50 ng/ml VEGF, 100 nM PADQ or 700 nM SU1498 for 7 days. BrdU (10 mu M) was added to the culture medium 24 hrs before cells were harvested and lysed. DNA was extracted and BrdU content was determined using an anti-BrdUELISA. The data are presented as percent changes in optical density compared to control (Growth medium).
FIG. 33 represents in vitro generation of spheres is stimulated by intraventricular VEGF infusion. After 7 days of intraventricular infusion of either artificial cerebrospinal fluid (CSF) or VEGF, cells were isolated from the lateral ventricle wall, seeded at 10000 cells/well in Growth medium (Neurobasal+B27+EGF+ ***FGF*** - ***2*** +heparin) and grown in culture for 3 weeks. The efficiency to generate spheres from the lateral ventricle wall is substantially increased by previous in vivo infusion of VEGF. It was concluded from this finding, that VEGF stimulates the multipotent neural stem cells of the lateral ventricle wall in vivo leading to a facilitated neural stem cell growth in vitro.
FIG. 34 shows that the VEGF and FLT-4 genes are expressed in cultured human neural stem cells.
FIG. 35 shows that the FLT-1 and FLK-1 genes are expressed in cultured human neural stem cells.

L4 ANSWER 7 OF 24 IFIPAT COPYRIGHT 2004 IFI on STN
AN 10304823 IFIPAT;IFIUDB;IFICDB
TI DISCOVERY, LOCALIZATION, HARVEST, AND PROPAGATION OF AN FGF2 AND BDNF-RESPONSIVE POPULATION OF NEURAL AND NEURONAL PROGENITOR CELLS IN THE ADULT HUMAN FOREBRAIN; THERAPY FOR BRAIN DISORDERS
IN GOLDMAN STEVEN A; NEDERGAARD MAIKEN
PA Unassigned Or Assigned To Individual (68000)
PI US 2003049234 A1 20030313
AI US 1999-271969 19990318
PRAI US 1998-79226P 19980325 (Provisional)
FI US 2003049234 20030313
DT Utility; Patent Application - First Publication
FS CHEMICAL
APPLICATION
CLMN 41
GI 6 Figure(s).
FIG. 1 shows that cultures of the adult rat SZ typically display a burst of neuronal outgrowth during the first 11 days in vitro (DIV) but suffer virtually complete neuronal loss during the 2 weeks thereafter. However, in the presence of BDNF (20 ng/ml), new adult neurons survived substantially longer than did their counterparts grown in unsupplemented media. FIG. 1A shows adult rat SZ neurons grown in control medium after 22 days. FIGS. 1B and 1C show sister cultures grown in BDNF after 36 and 57 days in vitro, respectively.
FIG. 2 shows a region sampled for culture and immunohistology. FIGS. 2A-B

are pre- and post-operative coronal MRI images of a 37 year-old female with refractory epilepsy and radiographic mesial temporal sclerosis. FIG. 2A shows atrophic sclerosis of the right hippocampus and dentate gyrus (arrow). FIG. 2B is of the same patient, 2 weeks after surgical resection. FIG. 2C shows a schematic coronal view of temporal lobe, showing the subventricular region typically sampled for culture. Cortical specimens were typically obtained from the adjacent inferior temporal gyrus (modified with permission from Kirschenbaum et al., 1994 (Kirschenbaum, 1994, which is hereby incorporated by reference)).

FIG. 3 shows that human temporal SZ-derived neurons are physiologically active and are the product of neurogenesis in vitro. A-F, cultures were challenged with high K+ to seek evidence of neuron-like depolarization-induced increments in cytosolic calcium (Ca2+i). In this plate, a temporal SZ culture was tested after 28 days in vitro, after loading with the Ca2+sensitive dye fluo-3. FIG. 3A is a phase micrograph of two adjacent cells, one neuron-like and the other astrocytic. Scale bar=25 mu m. FIG. 3B shows their baseline levels of Ca2+i, as viewed by confocal microscopy with laser scanning at 488 nm. FIG. 3C depicts the same two cells within seconds after exposure to 60 mmol/K+. The neuron-like cell increased its Ca2+i rapidly and reversibly, in contrast to the cocultured ***astrocytes*** . FIG. 3D shows that with the addition of tetrodotoxin (TTX) (1 mu mol/L; Sigma Chemical Co., St. Louis, Mo.), K+-stimulation yielded a more than sixfold rise in neuronal cytosolic Ca2+i, whereas astrocytic Ca2+i increased less than twofold. The depolarization-induced Ca2+ increment of this cell suggested its neuronal phenotype, as did the TTX accentuation of its Ca2+i response. The increased density of TTX-sensitive Na+ channels in neurons, relative to glia, would have been expected to yield a neuron-selective enhancement of the K+-stimulated Ca2+i response by TTX. FIG. 3E, at withdrawal of K+ from the medium, each cell returned to its resting Ca2+i level. FIG. 3F, after addition of the calcium inophore lasalocid (50 mmol/L, Sigma), added as a positive control to maximize Ca2+ entry in both cells. These results suggested the activity of voltage-gated calcium channels in the adult-derived neurons. FIGS. 3G and 3H show cultures which were stained for neuron-specific antigens and were subjected to 3H-thymidine autoradiography. FIG. 3G depicts a MAP-5+ cell observed in dissociate culture after 15 days in vitro. FIG. 3H shows a cell which has incorporated 3H-thymidine in vitro, suggesting its origin from precursor mitosis (Kirschenbaum, 1994, which is hereby incorporated by reference).

FIG. 4 demonstrates that the adult human subependyma harbors scattered islands of apparent progenitor cells. The ependyma/ subependyma lining the temporal horn of the lateral ventricle, deep to the inferior temporal gyrus, in a 27 year-old man with mesial temporal sclerosis is shown. This region had distinct squamous ependymal and cuboidal subependymal layers, each 1-2 cells deep. FIGS. 4A-B show scattered islands of subependymal cells expressed the neural progenitor cell marker musashi. These sections were immunoperoxidase stained for musashi using anti-mouse musashi IgG. FIGS. 4C-D show loose aggregates of adult SZ cells also expressed Hu proteins, a triad of early, neuron-specific RNA-binding proteins recognized by MAb 16A11 (Baram, et al., 1995; Szabo, et al. 1991, which are hereby incorporated by reference). Immunostaining revealed frequent pockets of Hu+ scattered about the ventricular epithelium (Scale=50 mu m.).

FIG. 5 demonstrates that serial treatment with fibroblast growth factor-2 ("FGF2") and brain-derived neurotrophic factor ("BDNF") allows for the expansion and survival of neurons arising from human subependymal zone ("SZ"). FIG. 5A shows cell outgrowth from adult human SZ, 9 wks in vitro. The explant was exposed to FGF2 for a week, in the presence of 3H-thymidine, then to BDNF for 2 months, then fixed and stained for the neuronal marker MAP-2. FIG. 5B shows that two of these MAP-2+ neurons incorporated 3H-thymidine during their first week in vitro (aggregations of silver grains denoted by arrows), indicating mitotic neurogenesis during the period of FGF2 exposure. FIG. 5C is a high power visualization of the cell asterisked in FIGS. 5A-B, stained for MAP-2. FIG. 5D shows the cells after 3Hthymidine autoradiography. FIG. 5E is another outgrowth from an adult temporal SZ explant, 7 weeks in culture. This sample was also raised in FGF2 followed by BDNF, then subjected to confocal imaging of the fluorescence signal emitted by the calcium indicator dye fluo-3; this was done to assess neuronal responses to depolarizing stimuli. FIG. 5F depicts the baseline fluo-3 fluorescence signal from the neurons indicated in phase in 5E (arrows). FIG. 5G was taken immediately after depolarization by 60 mM KCl. A similar response to 10 mu M glutamate was observed. In each of these photos, the Scale=25 mu m.

FIG. 6 shows that rare neocortical explants also exhibited neuronal production and outgrowth. In cultures derived from 2 patients, neuronal outgrowth was noted from explants derived from both the SZ and cortex.

This suggested that temporal cortex might harbor residual neuronal precursors, analogous to those of the SZ. FIG. 6A shows a field of neurons found in a temporal neocortical explant culture after 9 wks in vitro, revealing a congregation of neurons lying upon a field of ependymal cells and glia. This culture was derived from a 28 year-old man, and was treated sequentially with ***FGF*** - ***2*** (1 wk) and BDNF (8 wks). The asterisk in FIG. 6A corresponds to the same position as that in FIGS. 6B-E. FIG. 6B is a higher magnification within FIG. 6A (note: FIGS. 6B-E are rotated 90 degrees counter-clockwise with respect to FIG. 6A). FIG. 6C demonstrates that immunostaining for MAP-2 indicates the neuronal identity of these cells. FIG. 6D provides the baseline calcium signal of these neurons which was determined by confocal imaging their emission to argon laser excitation at 488 nm, after loading the cells with fluo-3. FIG. 6E shows the marked increase in fluo-3 fluorescence typical of the neuronal calcium response to K+-depolarization. FIGS. 6F-G shows that of 11 MAP-2+ cells in FIG. 6B, four were found to have incorporated 3H-thymidine+; two of these are shown after 3Hthymidine autoradiography in FIG. 6F (arrows, in phase), and after staining for MAP-2 in FIG. 6G. The remaining seven neurons in FIG. 6B may have been cells that committed to neuronal differentiation without intervening cell division.

L4 ANSWER 8 OF 24 IFIPAT COPYRIGHT 2004 IFI on STN
AN 10220601 IFIPAT;IFIUDB;IFICDB
TI EMBRYONIC STEM CELLS AND NEURAL PROGENITOR CELLS DERIVED THEREFROM
IN Ben-Hur Tamir (IL); Pera Martin Frederick (AU); Reubinoff Benjamin Eithan (IL)
PA Unassigned Or Assigned To Individual (68000)
PI US 2002164308 A1 20021107
AI US 2001-970543 20011004
RLI US 2001-808382 20010314 CONTINUATION-IN-PART PENDING
PRAI AU 2000-6211 20000314
AU 2000-1279 20001106
AU 2001-2920 20010206
FI US 2002164308 20021107
DT Utility; Patent Application - First Publication
FS CHEMICAL
APPLICATION
CLMN 73
GI 38 Figure(s).

FIG. 1 shows phase contrast micrographs of ES cells and their differentiated progeny. A, inner cell mass three days after plating. B, colony of ES cells. C, higher magnification of an area of an ES cell colony. D, an area of an ES cell colony undergoing spontaneous differentiation during routine passage. E, a colony four days after plating in the absence of a feeder cell layer but in the presence of 2000 units/ml human LIF undergoing differentiation in its periphery,. F, neuronal cells in a high density culture. Scale bars: A and C, 25 microns; B and E, 100 microns; D and F, 50 microns.

FIG. 2 shows marker expression in ES cells and their differentiated somatic progeny. A, ES cell colony showing histochemical staining for alkaline phosphatase. B. ES cell colony stained with antibody MC-813-70 recognising the SSEA-4 epitope. C, ES cell colony stained with antibody TRAL-60. D, ES cell colony stained with antibody GCTM-2. E, high density culture, cell body and processes of a cell stained with antineurofilament 68 kDa protein. F, high density culture, cluster of cells and network of processes emanating from them stained with antibody against neural cell adhesion molecule. G, high density culture, cells showing cytoplasmic filaments stained with antibody to muscle actin. H, high density culture, cell showing cytoplasmic filaments stained with antibody to desmin. Scale bars: A, 100 microns; B-D, and F, 200 microns; E, G and H, 50 microns.

FIG. 3 shows RT-PCR analysis of gene expression in ES cells and their differentiated derivatives. All panels show 1.5% agarose gels stained with ethidium bromide. A, expression of Oct-4 and b-actin in ES stem cells and high density cultures. Lane 1, 100 bpDNA ladder. Lane 2, stem cell culture, b-actin. Lane 3, stem cell culture, Oct-4. Lane 4, stem cell culture, PCR for Oct-4 carried out with omission of reverse transcriptase. Lane 5, high density culture, b-actin. Lane 6, high density culture, Oct-4. Lane 7, high density culture, PCR for Oct-4 carried out with omission of reverse transcriptase. b-actin band is 200 bp and Oct-4 band is 320 bp. B, expression of nestin and Pax-6 in neural progenitor cells that were derived from differentiating ES colonies. Left lane, 100 bp DNA ladder; lane 1, b-actin in HX 142 neuroblastoma cell line (positive control for nestin PCR) ; lane 2, b-actin in neural progenitor cells; lane 3, nestin in HX 142 neuroblastoma cell line; lane 4, nestin in neural progenitor cells; lane 5, nestin PCR on same sample

as lane 4 without addition of reverse transcriptase; lane 6, Pax-6; lane 7, Pax-6 PCR on same sample as line 6 without addition of reverse transcriptase. Nestin band is 208 bp, Pax-6 is 274 bp. C, expression of glutamic acid decarboxylase in cultures of neurons. Left lane, 100 bp DNA ladder; lane 1, b-actin; lane 2, b-actin PCR on same sample as lane 1 without addition of reverse transcriptase; lane 3, glutamic acid decarboxylase; lane 4 glutamic acid decarboxylase on same sample as lane 3 without addition of reverse transcriptase. Glutamic acid decarboxylase band is 284 bp. D, expression of GABA A alpha 2 receptor. Left lane, 100 bp DNA ladder; lane 1, b-actin; lane 2, GABA A alpha 2 receptor; lane 3, PCR without addition of reverse transcriptase. GABA A alpha 2 receptor subunit band is 471 bp.

FIG. 4 shows histology of differentiated elements found in teratomas formed in the testis of SCID mice following inoculation of HES-1 or HES-2 colonies. A, cartilage and squamous epithelium, HES-2. B, neural rosettes, HES-2. C, ganglion, gland and striated muscle, HES-1. D, bone and cartilage, HES-1. E, glandular epithelium, HES-1. F, ciliated columnar epithelium, HES-1. Scale bars: A-E, 100 microns; F, 50 microns.

FIG. 5 shows phase contrast microscopy and immunochemical analysis of marker expression in neural progenitor cells isolated from differentiating ES cultures. A, phase contrast image of a sphere formed in serum-free medium. B-D, indirect immunofluorescence staining of spheres, 4 hours after plating on adhesive substrate, for N-CAM, nestin, and vimentin respectively. In C and D, cells at the base of the sphere were placed in plane of focus to illustrate filamentous staining; confocal examination revealed that cells throughout the sphere were decorated by both antibodies. Scale bar is 100 microns in all panels.

FIG. 6 shows phase contrast appearance and marker expression in cultures of neurons derived from progenitor cells shown in FIG. 5. A, phase contrast micrograph of differentiated cells emanating from a sphere plated onto adhesive surface. B-H, indirect immunofluorescence microscopy of differentiated cells decorated with antibodies against 200 kDa neruofilament protein (B), 160 kDa neurofilament protein (C), MAP2a+b (D), glutamate (E), synaptophysin (F), glutamic acid decarboxylase (G) and beta-tubulin (H). Scale bars: A, ;B, 100 microns; C, 200mircons; D, 20 microns; E and F, 10 microns; G, 20 microns; H, 25 microns.

FIG. 7 shows neural precursors proliferating as a monolayer on a plastic tissue culture dish in the presence of EGF and ***bFGF*** . These monolayer cultures of proliferating cells were obtained after prolonged cultivation (2-3 weeks) of the spheres in the presence of growth factors without sub-culturing.

FIG. 8 shows phase contrast appearance of a culture consisting of differentiated neural cells.

FIG. 9 shows phase contrast appearance of a sphere that is formed 72 hours after the transfer of a clump of undifferentiated ES cells into serum free medium (Scale bar 100 microns).

FIG. 10 shows linear correlation between the volume of spheres and the number of progenitor cells within a sphere. Spheres of various diameters that were generated from differentiating ES colonies and were propagated for 14-15 weeks were dissaggregated into single cell suspension and the number of cells per sphere was counted.

FIG. 11 shows indirect immunofluorescence staining of a sphere, 4 hours after plating on adhesive substrate, for N-CAM. The sphere was generated by direct transfer of undifferentiated ES cells into serum free medium and propagation of the resulting spheres for 5 passages. (Scale bar 100 microns).

FIG. 12 shows indirect immunofluorescence membraneous staining for N-CAM of single cells at the periphery of a sphere 4 hours after plating on adhesive substrate. The sphere was generated by direct transfer of undifferentiated ES cells into serum free medium and propagation of the resulting spheres for 5 passages. (Scale bar 25 microns).

FIG. 13 shows indirect immunofluorescence staining of a spheres 4 hours after plating on adhesive substrate for the intermediate filament nestin. Cells at the base of the sphere were placed in plane of focus to illustrate filamentous staining. The sphere was generated by direct transfer of undifferentiated ES cells into serum free medium and propagation of resulting spheres for 5 passages. (Scale bar 25 microns).

FIG. 14 shows indirect immunofluorescence microscopy of a differentiated cell decorated with antibodies against the oligodendrocyte progenitor marker O4. (Scale bar 12.5 microns).

FIG. 15 shows indirect immunofluorescence staining of a sphere 4 hours after plating on adhesive substrate for the intermediate filament vimentin. Cells at the base of the sphere were placed in plane of focus to illustrate filamentous staining. The sphere was generated by direct transfer of undifferentiated ES cells into serum free medium and propagation of resulting spheres for 7 passages. (Scale bar 25 microns).

FIG. 16 shows the growth pattern of spheres that were generated directly from undifferentiated ES cells. Each bar represents the mean (+-SD) increment in volume per week of 24 spheres at first to sixteen weeks after derivation. A more excessive growth rate is evident during the first 5 weeks.

FIG. 17 shows persistent growth in the volume of spheres along time. Each bar represents the mean (+-SD) increment in volume per week of 24 spheres at nine to twenty one weeks after derivation. The spheres were generated from differentiating ES colonies.

FIG. 18 shows linear correlation between the volume of spheres and the number of progenitor cells within a sphere. Spheres of various diameters, that were generated directly from undifferentiated ES cells and were propagated 5-7 weeks, were dissaggregated into single cell suspension and the number of cells per sphere was counted.

FIG. 19 shows RT-PCR analysis of gene expression in ES cells (a week after passage) and neural spheres derived from differentiating colonies and directly from undifferentiated ES cell. All panels show 2% agarose gels stained with ethidium bromide. Lanes 1, 2 and 3, Oct-4 in ES cell culture, neural spheres derived from differentiating colonies, neural spheres derived from undifferentiated ES cells. Lane 4, stem cell culture, PCR for Oct-4 carried out with omission of reverse transcriptase. Lanes 5, 6, and 7, nestin in ES cell culture, neural spheres derived from differentiating colonies, neural spheres derived from undifferentiated ES cells. Lane 8, stem cell culture, PCR for nestin carried out with omission of reverse transcriptase. Lanes 9, 10 and 11, Pax-6 in ES cell culture, neural spheres derived from differentiating colonies, neural spheres derived from undifferentiated ES cells. Lane 12, stem cell culture, PCR for Pax-6 carried out with omission of reverse transcriptase. Lane 13, 100 bp DNA ladder. Oct-4 band is 320 bp, nestin is 208 bp and Pax-6 is 274 bp.

FIG. 20 shows indirect immunofluorescence microscopy of differentiated ***astrocyte*** cells decorated with antibody against GFAP. (Scale bar 25 microns).

FIG. 21 shows indirect immunofluorescence microscopy of brain sections of two mice (A and B) 4 weeks after transplantation of human neural precursors prelabeled with BrDU. Cells with a nucleus decorated with anti BrDU (brown stain, black arrow) are evident near the ventricular surface (white arrow indicate mouse unstained nuclei, bar=20 microns).

FIG. 22 shows indirect immunofluorescence microscopy of brain sections of a mice 4 weeks after transplantation of human neural precursors prelabeled with BrDU. Wide spread distribution of transplanted human cells decorated by anti BrDU antibodies is evident in the periventricular areas. The periventricular area in A is demonstrated at a higher magnification in B and C. (Bars=150, 60 and 30 microns in A, B and C).

FIG. 23 shows indirect immunocytochemical microscopy of brain sections of a mice 4 weeks after transplantation of human neural precursors prelabeled with BrDU. The transplanted human cells are migrating along the rostral migratory stream (bar=150 microns).

FIG. 24 shows RT-PCR analysis of gene expression in neural spheres derived from differentiating (A) and undifferentiated (B) ES cells. All panels show 2% agarose gels stained with ethidium bromide. Lanes 1 and 10, 100 bpDNA ladder; Lane 2, CD34; Lane 3, Flk-1; lane4, HNF-3; lane 5, alfafetoprotein. Lanes 6-9 PCR reaction on the same samples as lanes 2-5 carried out with the omission of reverse transcriptase. CD-34 band is 200 bp, Flk-1 is 199, HNF-3 is 390, AFP is 340 bp.

FIG. 25 shows by RT-PCR analysis the expression of GFAP and the pip gene in differentiated cells from neural spheres derived from differentiating ES cell colonies. The expression of GFAP indicates differentiation into ***astrocytes*** while the presence of both dm-20 and pip transcripts indicate that differentiation into oligodendrocyte cells has occurred. Lanes 2, 4, 6 and lanes 3, 5, 7 are from two separate RNA samples from differentiated spheres that were independently derived from ES cells. Lane 1 and 8, 100 bp DNA ladder; Lanes 2 and 4, GFAP; lanes 3 and 5, plp and dm-20; lanes 6 and 7, PCR reaction on the same samples as lanes 3 and 5 carried out with the omission of reverse transcriptase. GFAP band is 383, pip band is 354 bp and dm-20 is 249 bp.

FIG. 26 shows a dark field stereomicroscopic photograph of areas (arrows) destined to give rise to neural precursors in a differentiating ES cell colony 3 weeks after passage (bar=1.6 mm).

FIG. 27 shows indirect immunochemical analysis of marker expression in cultures of neurons derived from progenitor cells that were derived directly from undifferentiated ES cells: A, indirect immunofluorescence microscopy of neurits decorated with antibody against 160 kDa neurofilament protein. B and C, indirect immunofluorescence staining of differentiated cells for MAP2a+b and beta-tubulin III. Scale bars: A 100 microns, B and C 10 microns.

FIG. 28 shows indirect immunochemical analysis of the expression of tyrosine hydroxylase. Neurits (A) and a differentiated cell (B) are decorated with antibodies against tyrosine hydroxylase. Scale bars: 30 microns.

FIG. 29 shows in vivo differentiation into ***astrocyte*** cells of transplanted ***human*** ***neural*** ***progenitors*** prelabeled with BrDU. Donor cells are identified by indirect immunochemical detection of BrDU (dark nuclei, arrows). Duel staining demonstrates donor cells decorated by anti GFAP (orange). Transplanted cells are migrating into the brain parenchyma (white arrow) and are also found in the periventricular zone (dark arrow) (A), A higher magnification of cells that have differentiated into ***astrocytes*** and migrated into the host brain (B).

FIG. 30 shows in vivo differentiation into oligodendrocyte cells of transplanted ***human*** ***neural*** ***progenitors*** prelabeled with BrDU. Donor cells are identified by indirect immunochemical detection of BrDU (dark nuclei, arrows). Duel staining demonstrates donor cells decorated by anti CNPase (orange).

FIG. 31 shows cumulative growth curve for ***human*** ***neural*** ***progenitors*** derived from differentiating colonies. (A) Continuous growth is evident during an 18-22 week period. The increment in the volume of the spheres was continuously monitored as an indirect measure of the increase in cell numbers. A linear positive correlation between the volume of the spheres and the number of cells within the spheres (B, insert) was maintained along cultivation. It supported the validity of monitoring the increment of sphere volume as an indirect indicator of cell proliferation.

FIG. 32 shows RT-PCR analysis of the expression of non-neural markers in human ES derived spheres. All panels show 2% agarose gels stained with ethidium bromide. The symbols + and indicate whether the PCR reaction was performed with or without the addition of reverse transcriptase. A 1 Kb plus DNA ladder was used in all panels. beta-actin band is 291 bp, keratin is 780 bp, Flk-1 is 199 bp, CD34 is 200 bp, AC-133 is 200 bp, transferin is 367 bp, amylase is 490 bp and alpha 1 anti trypsin is 360 bp.

FIG. 33 shows a phase contrast micrograph of differentiated cells growing out from a sphere 2 weeks after plating onto an adhesive surface and culture in the absence of growth factors. Scale bar is 200 mu m.

FIG. 34 shows RT-PCR analysis of the expression of neuronal and glial markers in differentiated cells originating from human ES derived neural spheres. All panels show 2% agarose gels stained with ethidium bromide. The symbols + and -indicate whether the PCR reaction was performed with or without the addition of reverse transcriptase. A 1 Kb plus DNA ladder was used in all panels. Plp and dm-20 bands are 354 bp and 249 bp respectively, MBP is 379 bp, GFAP is 383 bp, NSE is 254 bp and NF-M is 430 bp.

FIG. 35 shows indirect immunochemical analysis of the expression of serotonin (A) and GABA (B). Scale bars are 20 mu m.

FIG. 36 shows dissemination of transplanted BrdU+ human ESderived neural progenitor cells in the mouse host brain.

(A) At 2 days after transplantation most cells were found lining the ventricular wall. (B) After 4-6 weeks most cells had left the ventricles (V) and populated the corpus callosum (CC), fimbria (fim), internal capsule (i.c.). BrdU+ cells were not found in the striatum (str) or CA region of the hippocampus (hipp). (C) Chains of BrdU+ cells were found in the rostral migratory stream (RMS). (D) BrdU+ cells in the periventricular white matter. (E) Higher magnification of D, to show nuclear specific localization of BrdU.

FIG. 37 shows identification of the transplanted cells in the brain by human and neural-lineage specific markers. (A) A typical chain of transplanted cells in the corpus callosum, stained with human specific anti-mitochondrial antibody. The mitochondrial staining (green fluorescence) on Nomarsky background (blue, cell nuclei indicated by asterisk) shows a typical perinuclear localization. (B) Double staining for BrdU (green fluorescence) and human specific anti ribonuclear protein (red fluorescence) shows nuclear co-localization, indicating that BrdU+ cells were indeed of human origin. (C) A GFAP+ ***astrocyte*** (red) from the periventricular region, colabeled with BrdU (green), indicating its origin from the graft. (D) An NG2+ oligodendrocyte progenitor (red) in the periventricular region, co-labeled with BrdU (green). (E) A CNPase+ oligodendrocyte (red) in the corpus callosum, colabeled with BrdU (immunohistochemistry, shown as dark nucleus in Nomarsky). (F) Neuronal processes in the fimbria, stained with a human specific anti-70 kDa neurofilament. (G) A beta III-tubulin+ neuron (green fluorescence) in the olfactory bulb, co-labeled with BrdU (as dark nucleus (arrow) in Nomarsky). Bars=10 mu m. !

L4 ANSWER 9 OF 24 IFIPAT COPYRIGHT 2004 IFI on STN
AN 10124433 IFIPAT;IFIUDB;IFICDB
TI EMBRYONIC STEM CELLS AND NEURAL PROGENITOR CELLS DERIVED THEREFROM; SUCH AS NEURAL PROGENITOR CELLS CAPABLE OF GIVING RISE TO MATURE SOMATIC CELLS INCLUDING NEURAL CELLS AND/OR GLIAL CELLS RECOGNIZABLE BY EXPRESSION OF SPECIFIC MARKERS
IN Ben-Hur Tamir (IL); Pera Martin Frederick (AU); Reubinoff Benjamin Eithan (IL)
PA Unassigned Or Assigned To Individual (68000)
PI US 2002068045 A1 20020606
AI US 2001-808382 20010314
PRAI AU 2000-6211 20000314
AU 2000-1279 20001106
AU 2001-2920 20010206
FI US 2002068045 20020606
DT Utility; Patent Application - First Publication
FS CHEMICAL
APPLICATION
CLMN 85
GI 30 Figure(s).

FIG. 1 shows phase contrast micrographs of ES cells and their differentiated progeny. A, inner cell mass three days after plating. B, colony of ES cells. C, higher magnification of an area of an ES cell colony. D, an area of an ES cell colony undergoing spontaneous differentiation during routine passage. E, a colony four days after plating in the absence of a feeder cell layer but in the presence of 2000 units/ml human LIF undergoing differentiation in its periphery, F, neuronal cells in a high density culture. Scale bars: A and C, 25 microns; B and E, 100 microns; D and F, 50 microns.

FIG. 2 shows marker expression in ES cells and their differentiated somatic progeny. A, ES cell colony showing histochemical staining for alkaline phosphatase. B. ES cell colony stained with antibody MC-813-70 recognising the SSEA-4 epitope. C, ES cell colony stained with antibody TRA1-60. D, ES cell colony stained with antibody GCTM-2. E, high density culture, cell body and processes of a cell stained with antineurofilament 68 kDa protein. F, high density culture, cluster of cells and network of processes emanating from them stained with antibody against neural cell adhesion molecule. G, high density culture, cells showing cytoplasmic filaments stained with antibody to muscle actin. H, high density culture, cell showing cytoplasmic filaments stained with antibody to desmin. Scale bars: A, 100 microns; B-D, and F, 200 microns; E, G and H, 50 microns.

FIG. 3 shows RT-PCR analysis of gene expression in ES cells and their differentiated derivatives. All panels show 1.5% agarose gels stained with ethidium bromide. A, expression of Oct-4 and b-actin in ES stem cells and high density cultures. Lane 1, 100 bpDNA ladder. Lane 2, stem cell culture, b-actin. Lane 3, stem cell culture, Oct-4. Lane 4, stem cell culture, PCR for Oct-4 carried out with omission of reverse transcriptase. Lane 5, high density culture, b-actin. Lane 6, high density culture, Oct-4. Lane 7, high density culture, PCR for Oct-4 carried out with omission of reverse transcriptase. b-actin band is 200 bp and Oct-4 band is 320 bp. B, expression of nestin and Pax-6 in neural progenitor cells that were derived from differentiating ES colonies. Left lane, 100 bp DNA ladder; lane 1, b-actin in HX 142 neuroblastoma cell line (positive control for nestin PCR) ; lane 2, b-actin in neural progenitor cells; lane 3, nestin in HX 142 neuroblastoma cell line; lane 4, nestin in neural progenitor cells; lane 5, nestin PCR on same sample as lane 4 without addition of reverse transcriptase; lane 6, Pax-6; lane 7, Pax-6 PCR on same sample as line 6 without addition of reverse transcriptase. Nestin band is 208 bp, Pax-6 is 274 bp. C, expression of glutamic acid decarboxylase in cultures of neurons. Left lane, 100 bp DNA ladder; lane 1, b-actin; lane 2, b-actin PCR on same sample as lane 1 without addition of reverse transcriptase; lane 3, glutamic acid decarboxylase; lane 4 glutamic acid decarboxylase on same sample as lane 3 without addition of reverse transcriptase. Glutamic acid decarboxylase band is 284 bp. D, expression of GABA A alpha 2 receptor. Left lane, 100 bp DNA ladder; lane 1, b-actin; lane 2, GABA A alpha 2 receptor; lane 3, PCR without addition of reverse transcriptase. GABA A alpha 2 receptor subunit band is 471 bp.

FIG. 4 shows histology of differentiated elements found in teratomas formed in the testis of SCID mice following inoculation of HES-1 or HES-2 colonies. A, cartilage and squamous epithelium, HES-2. B, neural rosettes, HES-2. C, ganglion, gland and striated muscle, HES-1. D, bone and cartilage, HES-1. E, glandular epithelium, HES-1. F, ciliated columnar epithelium, HES-1. Scale bars: A-E, 100 microns; F, 50 microns.

FIG. 5 shows phase contrast microscopy and immunochemical analysis of

marker expression in neural progenitor cells isolated from differentiating ES cultures. A, phase contrast image of a sphere formed in serum-free medium. B-D, indirect immunofluorescence staining of spheres, 4 hours after plating on adhesive substrate, for N-CAM, nestin, and vimentin respectively. In C and D, cells at the base of the sphere were placed in plane of focus to illustrate filamentous staining; confocal examination revealed that cells throughout the sphere were decorated by both antibodies. Scale bar is 100 microns in all panels.

FIG. 6 shows phase contrast appearance and marker expression in cultures of neurons derived from progenitor cells shown in FIG. 5. A, phase contrast micrograph of differentiated cells emanating from a sphere plated onto adhesive surface. B-H, indirect immunofluorescence microscopy of differentiated cells decorated with antibodies against 200 kDa neruofilament protein (B), 160 kDa neurofilament protein (C), MAP2a+b (D), glutamate (E), synaptophysin (F), glutamic acid decarboxylase (G) and beta-tubulin (H). Scale bars: A,;B, 100 microns; C, 200 mircons; D, 20 microns; E and F, 10 microns; G, 20 microns; H, 25 microns.

FIG. 7 shows neural precursors proliferating as a monolayer on a plastic tissue culture dish in the presence of EGF and ***bFGF*** . These monolayer cultures of proliferating cells were obtained after prolonged cultivation (2-3 weeks) of the spheres in the presence of growth factors without sub-culturing.

FIG. 8 shows phase contrast appearance of a culture consisting of differentiated neural cells.

FIG. 9 shows phase contrast appearance of a sphere that is formed 72 hours after the transfer of a clump of undifferentiated ES cells into serum free medium (Scale bar 100 microns).

FIG. 10 shows linear correlation between the volume of spheres and the number of progenitor cells within a sphere. Spheres of various diameters that were generated from differentiating ES colonies and were propagated for 14-15 weeks were dissaggregated into single cell suspension and the number of cells per sphere was counted.

FIG. 11 shows indirect immunofluorescence staining of a sphere, 4 hours after plating on adhesive substrate, for N-CAM. The sphere was generated by direct transfer of undifferentiated ES cells into serum free medium and propagation of the resulting spheres for 5 passages. (Scale bar 100 microns).

FIG. 12 shows indirect immunofluorescence membraneous staining for N-CAM of single cells at the periphery of a sphere 4 hours after plating on adhesive substrate. The sphere was generated by direct transfer of undifferentiated ES cells into serum free medium and propagation of the resulting spheres for 5 passages. (Scale bar 25 microns).

FIG. 13 shows indirect immunofluorescence staining of a spheres 4 hours after plating on adhesive substrate for the intermediate filament nestin. Cells at the base of the sphere were placed in plane of focus to illustrate filamentous staining. The sphere was generated by direct transfer of undifferentiated ES cells into serum free medium and propagation of resulting spheres for 5 passages. (Scale bar 25 microns).

FIG. 14 shows indirect immunofluorescence microscopy of a differentiated cell decorated with antibodies against the oligodendrocyte progenitor marker 04. (Scale bar 12.5 microns).

FIG. 15 shows indirect immunofluorescence staining of a sphere 4 hours after plating on adhesive substrate for the intermediate filament vimentin. Cells at the base of the sphere were placed in plane of focus to illustrate filamentous staining. The sphere was generated by direct transfer of undifferentiated ES cells into serum free medium and propagation of resulting spheres for 7 passages. (Scale bar 25 microns).

FIG. 16 shows the growth pattern of spheres that were generated directly from undifferentiated ES cells. Each bar represents the mean (+-SD) increment in volume per week of 24 spheres at first to twelve weeks after derivation. A more excessive growth rate is evident during the first 5 weeks.

FIG. 17 shows persistent growth in the volume of spheres along time. Each bar represents the mean (+-SD) increment in volume per week of 24 spheres at nine to twenty one weeks after derivation. The spheres were generated from differentiating ES colonies.

FIG. 18 shows linear correlation between the volume of spheres and the number of progenitor cells within a sphere. Spheres of various diameters, that were generated directly from undifferentiated ES cells and were propagated 5-7 weeks, were dissaggregated into single cell suspension and the number of cells per sphere was counted.

FIG. 19 shows RT-PCR analysis of gene expression in ES cells (a week after passage) and neural spheres derived from differentiating colonies and directly from undifferentiated ES cell. All panels show 2% agarose gels stained with ethidium bromide. Lanes 1, 2 and 3, Oct-4 in ES cell culture, neural spheres derived from differentiating colonies, neural

spheres derived from undifferentiated ES cells. Lane 4, stem cell culture, PCR for Oct-4 carried out with omission of reverse transcriptase. Lanes 5, 6, and 7, nestin in ES cell culture, neural spheres derived from differentiating colonies, neural spheres derived from undifferentiated ES cells. Lane 8, stem cell culture, PCR for nestin carried out with omission of reverse transcriptase. Lanes 9, 10 and 11, Pax-6 in ES cell culture, neural spheres derived from differentiating colonies, neural spheres derived from undifferentiated ES cells. Lane 12, stem cell culture, PCR for Pax-6 carried out with omission of reverse transcriptase. Lane 13, 100 bp DNA ladder. Oct-4 band is 320 bp, nestin is 208 bp and Pax-6 is 274 bp.

FIG. 20 shows indirect immunofluorescence microscopy of differentiated ***astrocyte*** cells decorated with antibody against GFAP. (Scale bar 25 microns).

FIG. 21 shows indirect immunofluorescence microscopy of brain sections of two mice (A and B) 4 weeks after transplantation of human neural precursors prelabeled with BrDU. Cells with a nucleus decorated with anti BrDU (brown stain, black arrow) are evident near the ventricular surface (white arrow indicate mouse unstained nuclei, bar=20 microns).

FIG. 22 shows indirect immunofluorescence microscopy of brain sections of a mice 4 weeks after transplantation of human neural precursors prelabeled with BrDU. Wide spread distribution of transplanted human cells decorated by anti BrDU antibodies is evident in the periventricular areas. The periventricular area in A is demonstrated at a higher magnification in B and C. (Bars=150, 60 and 30 microns in A, B and C).

FIG. 23 shows indirect immunocytochemical microscopy of brain sections of a mice 4 weeks after transplantation of human neural precursors prelabeled with BrDU. The transplanted human cells are migrating along the rostral migratory stream (bar=150 microns).

FIG. 24 shows RT-PCR analysis of gene expression in neural spheres derived from differentiating (A) and undifferentiated (B) ES cells. All panels show 2% agarose gels stained with ethidium bromide. Lanes 1 and 10, 100 bpDNA ladder; Lane 2, CD34; Lane 3, Flk-1; lane 4, HNF-3; lane 5, alfafetoprotein. Lanes 6-9 PCR reaction on the same samples as lanes 2-5 carried out with the omission of reverse transcriptase. CD-34 band is 200 bp, Flk-1 is 199, HNF-3 is 390, AFP is 340 bp.

FIG. 25 shows by RT-PCR analysis the expression of GFAP and the plp gene in differentiated cells from neural spheres derived from differentiating ES cell colonies. The expression of GFAP indicates differentiation into ***astrocytes*** while the presence of both dm-20 and plp transcripts indicate that differentiation into oligodendrocyte cells has occurred. Lanes 2,4,6 and lanes 3,5,7 are from two separate RNA samples from differentiated spheres that were independently derived from ES cells. Lane 1 and 8, 100 bp DNA ladder; Lanes 2 and 4, GFAP; lanes 3 and 5, plp and dm-20; lanes 6 and 7, PCR reaction on the same samples as lanes 3 and 5 carried out with the omission of reverse transcriptase. GFAP band is 383, plp band is 354 bp and dm-20 is 249 bp.

FIG. 26 shows a dark field stereomicroscopic photograph of areas (arrows) destined to give rise to neural precursors in a differentiating ES cell colony 3 weeks after passage (bar=1.6 mm).

FIG. 27 shows indirect immunochemical analysis of marker expression in cultures of neurons derived from progenitor cells that were derived directly from undifferentiated ES cells: A, indirect immunofluorescence microscopy of neurits decorated with antibody against 160 kDa neruofilament protein. B and C, indirect immunofluorescence staining of differentiated cells for MAP2a+b and beta-tubulin III. Scale bars: A 100 microns, B and C 10 microns.

FIG. 28 shows indirect immunochemical analysis of the expression of tyrosine hydroxylase. Neurits (A) and a differentiated cell (B) are decorated with antibodies against tyrosine hydroxylase. Scale bars: 30 microns.

FIG. 29 shows in vivo differentiation into ***astrocyte*** cells of transplanted ***human*** ***neural*** ***progenitors*** prelabeled with BrDU. Donor cells are identified by indirect immunochemical detection of BrDU (dark nuclei, arrows). Duel staining demonstrates donor cells decorated by anti GFAP (orange). Transplanted cells are migrating into the brain parenchyma (white arrow) and are also found in the periventricular zone (dark arrow) (A), A higher magnification of cells that have differentiated into ***astrocytes*** and migrated into the host brain (B).

FIG. 30 shows in vivo differentiation into oligodendrocyte cells of transplanted ***human*** ***neural*** ***progenitors*** prelabeled with BrDU. Donor cells are identified by indirect immunochemical detection of BrDU (dark nuclei, arrows). Duel staining demonstrates donor cells decorated by anti CNPase (orange). !

L4 ANSWER 10 OF 24 PROMT COPYRIGHT 2004 Gale Group on STN

ACCESSION NUMBER: 1998:578539 PROMT
TITLE: CytoTherapeutics Researchers Demonstrate Potential for Human Neural Stem Cells to Repair or Replace CNS Tissue.
SOURCE: Business Wire, (9 Nov 1998) pp. 1351.
LANGUAGE: English
WORD COUNT: 1701
FULL TEXT IS AVAILABLE IN THE ALL FORMAT

L4 ANSWER 11 OF 24 USPATFULL on STN
AN 2004:51457 USPATFULL
TI Functional role and potential therapeutic use of PACAP, VIP and Maxadilan in relation to adult neural stem or progenitor cells
IN Mercer, Alex, Bromma, SWEDEN
Patrone, Cesare, Hagersten, SWEDEN
Ronnholm, Harriet, Trangsund, SWEDEN
Wikstrom, Lilian, Spanga, SWEDEN
PI US 2004038888 A1 20040226
AI US 2003-429062 A1 20030502 (10)
PRAI US 2002-377734P 20020503 (60)
US 2002-393264P 20020702 (60)
US 2002-426827P 20021115 (60)
DT Utility
FS APPLICATION
LN.CNT 3987
INCL INCLM: 514/012.000
NCL NCLM: 514/012.000
IC [7]
ICM: A61K038-17
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 12 OF 24 USPATFULL on STN
AN 2004:13072 USPATFULL
TI Genetically-modified neural progenitors and uses thereof
IN Sabate, Olivier, Paris, FRANCE
Horellou, Philippe, Paris, FRANCE
Buc-Caron, Marie-Helene, Paris, FRANCE
Mallet, Jacques, Paris, FRANCE
PA Rhone-Poulenc Rorer S.A. (non-U.S. corporation)
PI US 2004009592 A1 20040115
AI US 2002-305386 A1 20021127 (10)
RLI Continuation of Ser. No. US 1997-810315, filed on 28 Feb 1997, ABANDONED
PRAI US 1996-12635P 19960301 (60)
DT Utility
FS APPLICATION
LN.CNT 1050
INCL INCLM: 435/368.000
NCL NCLM: 435/368.000
IC [7]
ICM: C12N005-08
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 13 OF 24 USPATFULL on STN
AN 2004:7427 USPATFULL
TI Potential growth factors from the human tumour cell line ht 1080
IN Minger, Stephen L., London, UNITED KINGDOM
Adams, Gregor, London, UNITED KINGDOM
Francis, Paul, London, UNITED KINGDOM
Mcclure, Myra, London, UNITED KINGDOM
PI US 2004005661 A1 20040108
AI US 2003-344503 A1 20030708 (10)
WO 2001-GB3523 20010806
PRAI GB 2000-19705 20000810
DT Utility
FS APPLICATION
LN.CNT 1664
INCL INCLM: 435/069.100
INCLS: 435/226.000; 435/320.100; 435/366.000; 530/350.000; 536/023.200
NCL NCLM: 435/069.100
NCLS: 435/226.000; 435/320.100; 435/366.000; 530/350.000; 536/023.200
IC [7]
ICM: C12N009-64
ICS: C07H021-04; C12N005-08; C07K014-47; C12P021-02
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 14 OF 24 USPATFULL on STN
AN 2003:312269 USPATFULL
TI Stem cell-like cells
IN Kruijer, Wiebe, Leusden, NETHERLANDS
PI US 2003219866 A1 20031127
AI US 2003-349505 A1 20030121 (10)
RLI Continuation of Ser. No. WO 2001-NL561, filed on 20 Jul 2001, UNKNOWN
PRAI EP 2000-202634 20000721
DT Utility
FS APPLICATION
LN.CNT 1309
INCL INCLM: 435/069.100
      INCLS: 435/320.100; 435/366.000; 530/350.000; 536/023.500
NCL NCLM: 435/069.100
      NCLS: 435/320.100; 435/366.000; 530/350.000; 536/023.500
IC [7]
      ICM: C07K014-475
      ICS: C07H021-04; C12P021-02; C12N005-08
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 15 OF 24 USPATFULL on STN
AN 2003:237328 USPATFULL
TI Functional role and potential therapeutic use of Reelin, Gas6 and
      Protein S in relation to adult neural stem or progenitor cells
IN Bertilsson, Goran, Vasterhaninge, SWEDEN
      Falk, Anna, Solna, SWEDEN
      Frisen, Jonas, Stockholm, SWEDEN
      Heidrich, Jessica, Arsta, SWEDEN
      Hellstrom, Kristina, Sodertalje, SWEDEN
      Kortesmaa, Jarkko, Stockholm, SWEDEN
      Lindquist, Per, Bromma, SWEDEN
      Lundh, Hanna, Solna, SWEDEN
      McGuire, Jacqueline, Huddinge, SWEDEN
      Mercer, Alex, Bromma, SWEDEN
      Patrone, Cesare, Hagersten, SWEDEN
      Ronnholm, Harriet, Trangsund, SWEDEN
      Wikstrom, Lilian, Spanga, SWEDEN
      Zachrisson, Olof, Spanga, SWEDEN
PI US 2003165485 A1 20030904
AI US 2002-291171 A1 20021108 (10)
PRAI US 2001-344725P 20011109 (60)
      US 2002-393263P 20020702 (60)
      US 2001-345064P 20011109 (60)
      US 2002-394397P 20020708 (60)
DT Utility
FS APPLICATION
LN.CNT 3554
INCL INCLM: 424/094.600
      INCLS: 424/146.100
NCL NCLM: 424/094.600
      NCLS: 424/146.100
IC [7]
      ICM: A61K038-46
      ICS: A61K039-395
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 16 OF 24 USPATFULL on STN
AN 2003:172722 USPATFULL
TI Compositions and methods for isolation, propagation, and differentiation
      of human stem cells and uses thereof
IN Neuman, Toomas, Santa Monica, CA, UNITED STATES
      Levesque, Michel, Beverly Hills, CA, UNITED STATES
PI US 2003118566 A1 20030626
AI US 2002-216677 A1 20020808 (10)
PRAI US 2001-310727P 20010808 (60)
      US 2001-312714P 20010816 (60)
DT Utility
FS APPLICATION
LN.CNT 1836
INCL INCLM: 424/093.210
      INCLS: 424/093.700; 435/368.000
NCL NCLM: 424/093.210
      NCLS: 424/093.700; 435/368.000
IC [7]
      ICM: A61K048-00
      ICS: C12N005-08

L4 ANSWER 17 OF 24 USPATFULL on STN
AN 2003:57459 USPATFULL
TI Isolation of neural stem cells using gangliosides and other surface markers
IN Klassen, Henry, Pasadena, CA, UNITED STATES
Schwartz, Michael, Garden Grove, CA, UNITED STATES
Young, Michael J., Gloucester, MA, UNITED STATES
PI US 2003040023 A1 20030227
AI US 2002-128009 A1 20020422 (10)
PRAI US 2001-285407P 20010420 (60)
DT Utility
FS APPLICATION
LN.CNT 1388
INCL INCLM: 435/007.210
INCLS: 435/368.000
NCL NCLM: 435/007.210
NCLS: 435/368.000
IC [7]
ICM: G01N033-567
ICS: C12N005-08
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 18 OF 24 USPATFULL on STN
AN 2003:37685 USPATFULL
TI Method for facilitating the production of differentiated cell types and tissues from embryonic and adult pluripotent and multipotent cells
IN Lanza, Robert, Clinton, MA, UNITED STATES
West, Michael, Boston, MA, UNITED STATES
PI US 2003027330 A1 20030206
AI US 2002-112939 A1 20020402 (10)
PRAI US 2001-280138P 20010402 (60)
DT Utility
FS APPLICATION
LN.CNT 1650
INCL INCLM: 435/366.000
INCLS: 435/455.000
NCL NCLM: 435/366.000
NCLS: 435/455.000
IC [7]
ICM: C12N005-08
ICS: C12N015-85
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 19 OF 24 USPATFULL on STN
AN 2002:301223 USPATFULL
TI Method of isolating human neuroepithelial precursor cells from human fetal tissue
IN Mayer-Proschel, Margot, Pittsford, NY, UNITED STATES
Rao, Mahendra S., Salt Lake City, UT, UNITED STATES
Tresco, Patrick A., Sandy, UT, UNITED STATES
Messina, Darin J., Salt Lake City, UT, UNITED STATES
PI US 2002168767 A1 20021114
AI US 2001-813429 A1 20010321 (9)
DT Utility
FS APPLICATION
LN.CNT 829
INCL INCLM: 435/368.000
INCLS: 800/008.000
NCL NCLM: 435/368.000
NCLS: 800/008.000
IC [7]
ICM: C12N005-08
ICS: A01K067-00

L4 ANSWER 20 OF 24 USPATFULL on STN
AN 2002:92658 USPATFULL
TI Compositions and methods for treatment of mitochondrial diseases
IN Von Borstel, Reid W., Potomac, MD, UNITED STATES
Saydoff, Joel A., Middletown, MD, UNITED STATES
PI US 2002049182 A1 20020425
AI US 2001-930494 A1 20010816 (9)
RLI Continuation-in-part of Ser. No. US 2001-763955, filed on 28 Feb 2001, PENDING A 371 of International Ser. No. WO 1999-US19725, filed on 31 Aug 1999, UNKNOWN Continuation-in-part of Ser. No. US 1998-144096, filed on 31 Aug 1998, PENDING

DT Utility
FS APPLICATION
LN.CNT 2171
INCL INCLM: 514/044.000
INCLS: 514/051.000
NCL NCLM: 514/044.000
NCLS: 514/051.000
IC [7]
ICM: A61K048-00
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 21 OF 24 USPATFULL on STN
AN 2002:66630 USPATFULL
TI Methods of transducing neural cells using lentivirus vectors
IN Davidson, Beverly L., North Liberty, IA, UNITED STATES
Alisky, Joseph M., Iowa City, IA, UNITED STATES
Dubensky, Thomas W., JR., Piedmont, CA, UNITED STATES
Hughes, Stephanie M., Iowa City, IA, UNITED STATES
Jolly, Douglas, Encinitas, CA, UNITED STATES
Sauter, Sybille L., Del Mar, CA, UNITED STATES
PI US 2002037281 A1 20020328
AI US 2001-866532 A1 20010525 (9)
PRAI US 2000-207541P 20000526 (60)
US 2001-279035P 20010327 (60)
DT Utility
FS APPLICATION
LN.CNT 1641
INCL INCLM: 424/093.210
INCLS: 435/456.000; 435/368.000
NCL NCLM: 424/093.210
NCLS: 435/456.000; 435/368.000
IC [7]
ICM: C12N015-867
ICS: A61K048-00; C12N005-08
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 22 OF 24 USPATFULL on STN
AN 2002:22068 USPATFULL
TI Method for isolating and purifying multipotential neural progenitor cells and multipotential neural progenitor cells
IN Goldman, Steven A., South Salem, NY, UNITED STATES
Okano, Hideyuki, Osaka, JAPAN
PI US 2002012903 A1 20020131
AI US 2000-747810 A1 20001222 (9)
PRAI US 1999-173003P 19991223 (60)
DT Utility
FS APPLICATION
LN.CNT 2350
INCL INCLM: 435/004.000
INCLS: 435/368.000
NCL NCLM: 435/004.000
NCLS: 435/368.000
IC [7]
ICM: C12Q001-00
ICS: C12N005-08
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 23 OF 24 USPATFULL on STN
AN 2002:12280 USPATFULL
TI GENETICALLY-MODIFIED NEURAL PROGENITORS AND USES THEREOF
IN SABATE, OLIVIER, PARIS, FRANCE
HORELLOU, PHILIPPE, PARIS, FRANCE
BUC-CARON, MARIE-HELENE, PARIS, FRANCE
MALLET, JACQUES, PARIS, FRANCE
PA Rhone-Poulenc Rorer, S.A. (non-U.S. corporation)
PI US 2002006660 A1 20020117
AI US 1997-810315 A1 19970228 (8)
PRAI US 1996-12635P 19960301 (60)
DT Utility
FS APPLICATION
LN.CNT 1048
INCL INCLM: 435/325.000
INCLS: 514/044.000
NCL NCLM: 435/325.000
NCLS: 514/044.000
IC [7]

ICM: C12N005-02
ICS: A61K031-70
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 24 OF 24 USPATFULL on STN
AN 1999:117338 USPATFULL
TI Engraftable human neural stem cells
IN Snyder, Evan Y., Jamaica Plain, MA, United States
Wolfe, John H., Philadelphia, PA, United States
Kim, Seung U., Vancouver, Canada
PA The Children's Medical Center Corp., Boston, MA, United States (U.S. corporation)
PI US 5958767 19990928
AI US 1998-133873 19980814 (9)
DT Utility
FS Granted
LN.CNT 1267
INCL INCLM: 435/368.000
INCLS: 435/455.000
NCL NCLM: 435/368.000
NCLS: 435/455.000
IC [6]
ICM: C12N005-08
EXF 935/325; 935/366; 935/368; 935/455
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
STN INTERNATIONAL LOGOFF AT 16:00:13 ON 23 APR 2004